



Cardinia

2023 Liveability Survey Report



Acknowledgement of Country

Cardinia Shire Council recognises and values the Boonwurrung¹, Bunurong and Wurundjeri tribes as the original inhabitants of the land that makes up Cardinia Shire. Cardinia Shire's name is derived from the Boonwurrung or Wadawurrung word 'Kar- din-yarr', meaning 'look to the rising sun' or 'close to the sunrise'. Council's logo, which includes a motif of the rising sun, reflects this meaning. Cardinia Shire Council acknowledges the right of Aboriginal, and indeed all Australians, to live according to their values and customs, subject to the law. Council is committed to developing and strengthening relationships through reconciliation. Council supports the reconciliation process, which promotes mutual respect and understanding of the Aboriginal peoples and of all ethnic groups and their history and culture in our community.

Statement of Inclusion

Cardinia Shire Council encourages a sense of belonging within our Shire. We support an inclusive community comprised of people from diverse backgrounds, including and not limited to Aboriginal and Torres Strait Islander people, people from cultural and linguistically diverse (CALD) backgrounds, those identifying as LGBTIQ+, people of faith, and people of all ages, genders and abilities.



¹ There are a number of acknowledged spellings for Boonwurrung and these include Bunurong, Bunwurrung, Boonwerung, Bunurowrung, Boonoorong and Bururong. Cardinia Shire Council uses the spelling proposed by N'arweet Carolyn Briggs

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Executive Summary

Cardinia Shire's Liveability Plan 2017-29 has a long-term vision to improve the liveability of our local area and in turn, to improve health and wellbeing of all residents. One of the ways we track how well we are doing against this plan is to collect data across the plan's liveability domains and health outcomes.

While a variety of surveys and publicly available data sets exist to collect information at a state-wide level, we have limited information to help us plan at a township or suburb level, and there are some topic area gaps. This survey was designed to fill those gaps. Understanding the differences in liveability, health and wellbeing at a local level helps us track how the Liveability Plan is performing, as well as plan and advocate for the different needs across the Shire.

The 2023 research is the third time this survey has been employed. Much of the 2023 questionnaire remains the same as previous years (2019 and 2021) to enable tracking across time. There were also additional questions included on a range of topics relevant at the time.

This survey is conducted using a true representative sampling methodology, randomly drawing residential households from Council's rates database, and matching selected households to Council contact databases to obtain email address. Selected households with an email address are sent a paper copy of the survey, whilst those with an email address receive an email invite to an online survey.

The survey was distributed on 30 June 2023 and closed on 30 July 2023. In 2023 there were n=870 completed surveys (14% response rate), up from n=772 in 2021 and n=732 in 2019.

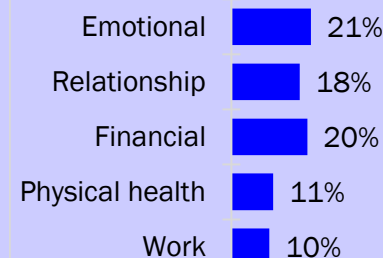
Coverage is relatively in line with distribution as per the 2021 Census for gender, region and diversity measures, however there was an over-representation of older adults and an under-representation of renters. This has been corrected through weighting, so that the results more accurately represent the community.

This report presents the key findings of the 2023 survey, compared to previous waves of the survey (where possible). It can be used by Council Staff and Liveability Plan Partners to track progress against the liveability objectives, and also provide data to assist with grants proposals, as well as strategic, service and program planning.

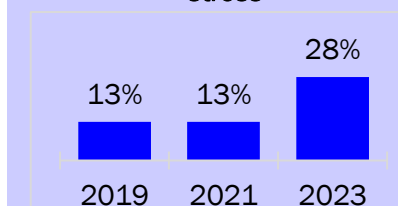
Some of the stand-out findings in 2023 were:

31% of those who speak a language other than English at home **experienced discrimination** based on their cultural background.

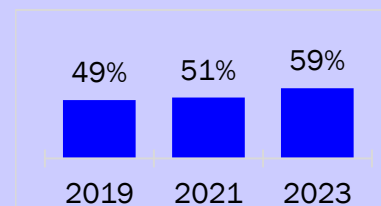
Many had experienced **gambling harm** (self or close friend / family).



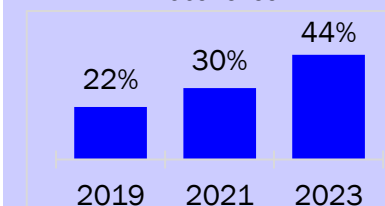
Increase in proportion experiencing **rental or mortgage stress**



Perceived **safety** (good+very good) of **local footpaths** has been increasing.



Increase in incidence of **seeing someone homeless** in their local area

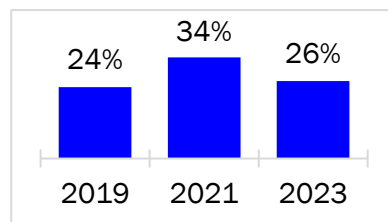


Summary of key findings

The following pages show the key findings from the 2023 Liveability survey for each Liveability Survey outcome and domain. Please note that the x axis (vertical) varies for each graph.

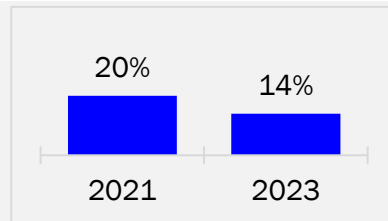
Improve mental health and wellbeing

Mental health issues had an impact on them or their family within the 12 months prior to interview. Increased in 2021 but has since returned to pre-COVID-19 levels.

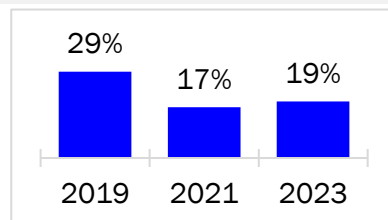


Accessed mental health services in the year prior to interview. Decreased in 2023, not asked in 2019.

In 2023, 69% of those who had accessed mental health services travelled outside of the Shire to do so.

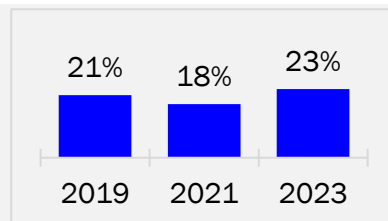


Completely connected to the land that you live on. Decreased notably in 2021 and has stayed low.



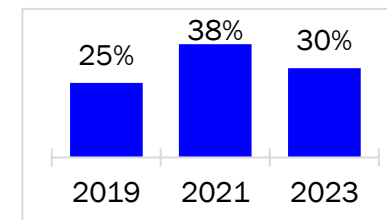
Self or family experienced negative impact from financial difficulties in the 12 months prior to interview.

Improved during COVID-19. Since fallen back to pre-COVID-19 levels.



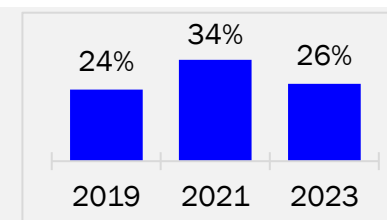
Self or family experienced negative impact from workplace stress in the 12 months prior to interview.

Became worse during COVID-19, gradually improving.



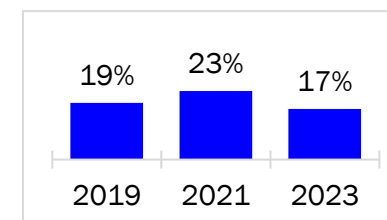
Self or family experienced negative impact from mental health issues in the 12 months prior to interview.

Became worse during COVID-19, gradually improving.

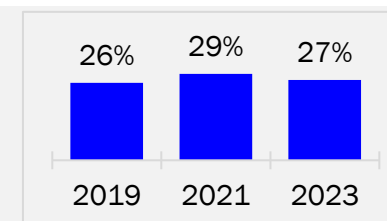


Improve social cohesion

Completely + mostly connected to the local community. Decreased notably since 2021.



Not enough connection to the local community. Remained relatively constant over time.



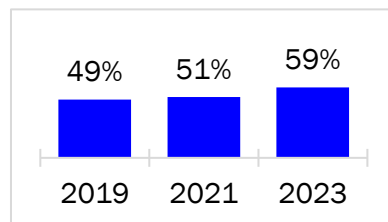
Experienced discrimination. First asked in 2023.

31% of those who speak a language other than English at home experienced discrimination based on their cultural background.

23%

Improve safety

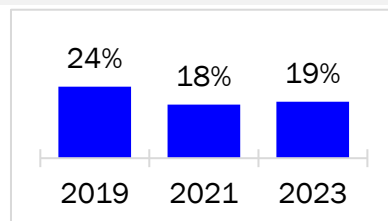
Rated local footpath safety as very good or good (of those who had used footpaths).



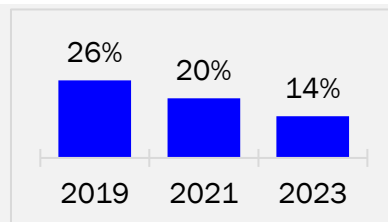
Have some form of preparation for extreme weather. First asked in 2023. Main preparations were ensuring insurance covers damage (51%), remove rubbish from property (51%) and clean gutters regularly (48%).

81%

Self or family experienced negative impact from crime or safety issues in the 12 months prior to interview. Fell during COVID-19 and has remained low in 2023.

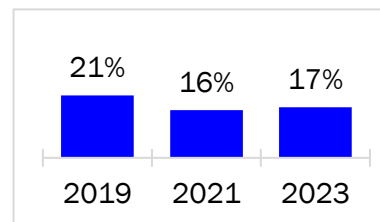


Self or family experienced negative impact from dangerous driving in the 12 months prior to interview. Steadily decreasing.

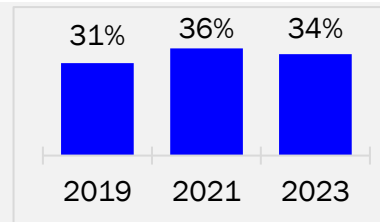


Improve healthy eating and active living

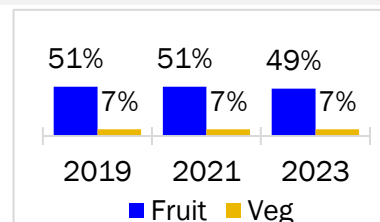
Play organised sport. Asked of all members of household (covers all ages). Hasn't recovered after falling during COVID-19.



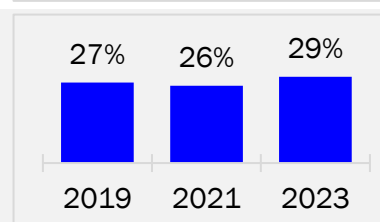
Consume fast food weekly or more often. Asked of all members of household (covers all ages). Increased during COVID-19, but since returned to pre-COVID-19 levels.



Meet fruit and vegetable consumption guidelines. Asked of all members of household (covers all ages). No change over time.



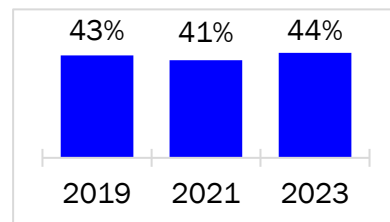
Like to visit leisure centres. Relatively constant over time.



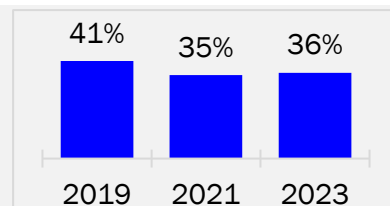
Reduce family violence

Rate family violence as a serious problem.

Relatively constant over time.

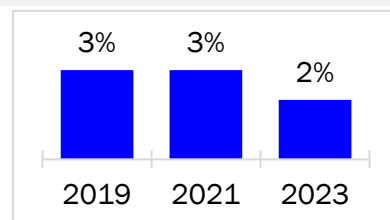


Perceive family violence to be extremely + very common. Fell in 2021 and has stayed low.



Family violence had had a negative impact on themselves or their family in the 12 months prior to interview.

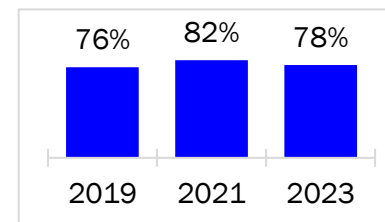
No change over time.



Improve financial wellbeing and resilience

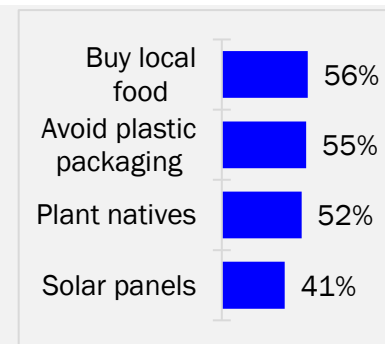
Has someone outside household who can care for person or children in an emergency.

Improved during COVID-19. Since fallen back to pre-COVID-19 levels.



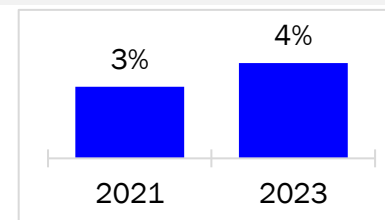
Actions taken to minimise their impact on environment.

New question in 2023, actions undertaken by more than 50%.



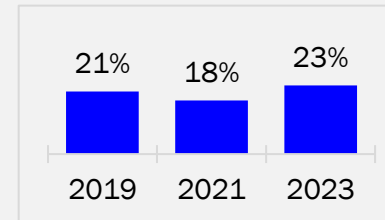
Accessed financial support services in the 12 months prior to interview.

Not asked in 2019. No change over time. Over half (55%) of those accessing financial support services did so outside of the Shire.



Financial difficulties or issues had an impact on them or their family within the 12 months prior to interview.

Improved during COVID-19. Since fallen back to pre-COVID-19 levels.

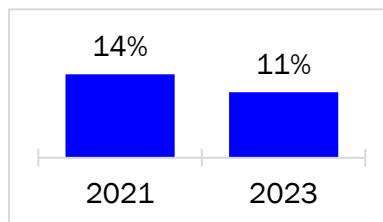


Reduce harm from alcohol, drugs and gambling

Consume alcohol daily or most days.

Not asked in 2019. Asked for all adults in the household.

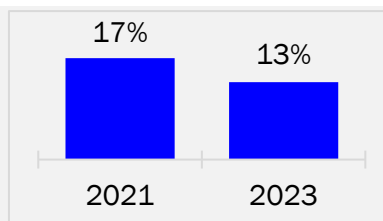
Fallen since COVID-19.



Consume more than 4 standard drinks per drinking session (of those who drink).

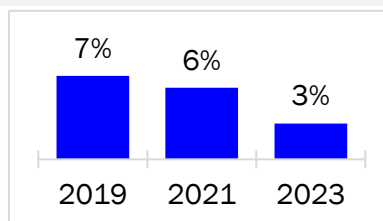
Not asked in 2019. Asked for all adults in the household.

Fallen since COVID-19.



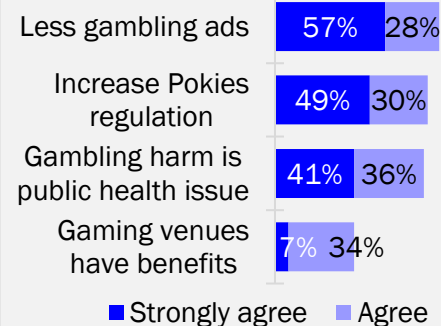
Alcohol addiction or binge drinking had negative impact on self or family in 12 months prior to interview.

Declining over time.



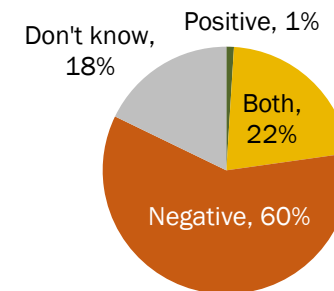
Agree with statements regarding gambling in the community.

New question in 2023.



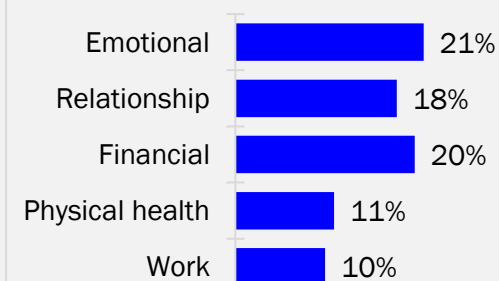
Perceived impact of pokie machines on the local community.

2021 data.



Experienced gambling harm to either themselves or a close friend or family member.

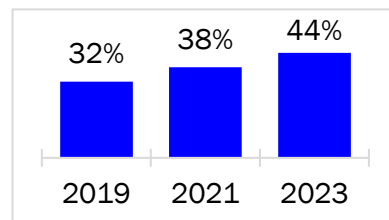
New question in 2023.



Active travel

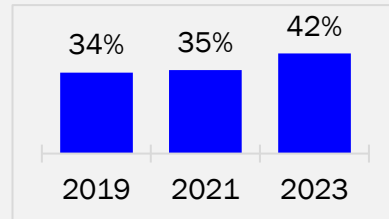
Those who use local footpaths and rate them as very good or good for continuity (can walk where you need to go entirely on footpaths without any gaps).

Improving over time.



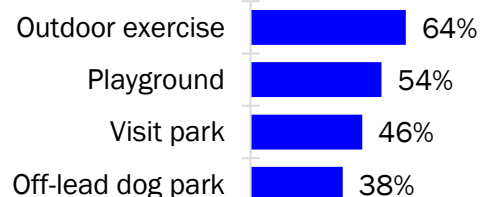
Those who use local footpaths and rate them as very good or good for accessibility for prams / those with mobility impairments.

Improved in 2023.



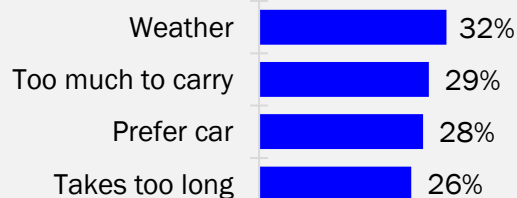
Proportion of people who undertake activities who travel to them by active transport.

New question in 2023. Shows those where 30% or above use active transport to travel to activity.



Barriers to using active transport more for local trips.

New question in 2023. Shows those where 25% or more indicated it as a barrier.

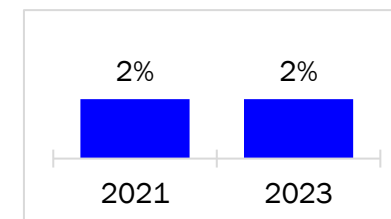


Food

Accessed food support services in the 12 months prior to interview.

Not asked in 2019. No change over time.

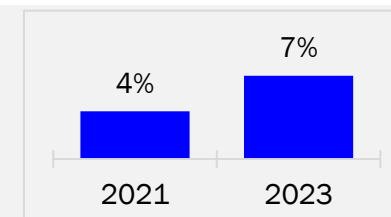
Over half (65%) of those accessing food support services did so with a service within Cardinia Shire.



Ran out of food and couldn't afford to buy more in the 12 months prior to interview.

Not asked in 2019.

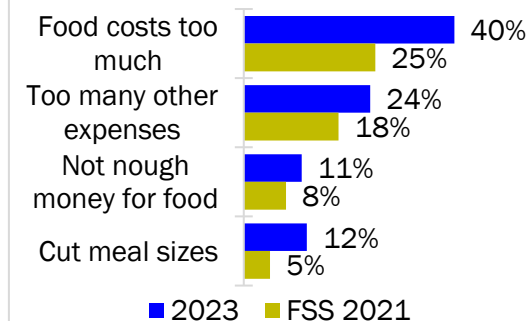
Increased in 2023.



Experiences of food insecurity.

New question in 2023, compared to Food Security Survey (FSS) conducted in 2021.

Findings highlight recent cost of living pressures.



Incidence of spending more than 30% of household income on food.

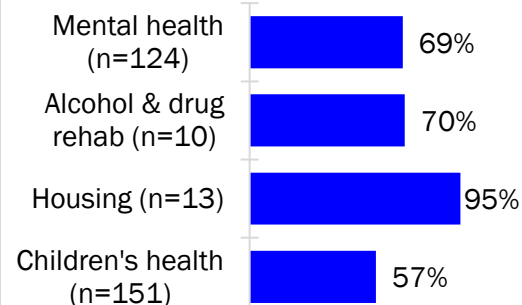
First asked in 2023.

33%

Community infrastructure and services

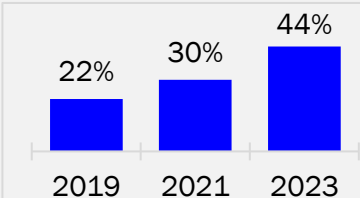
Travel outside of Cardinia Shire to access services.

Proportion of those who access each service who travel outside of Cardinia Shire for that service.



Seen someone who is homeless in your local area.

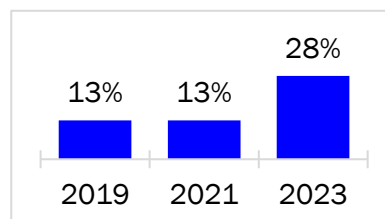
Worsening over time.



Housing

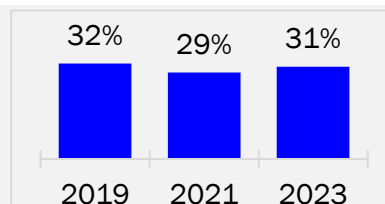
Self or family experienced negative impact from rent or mortgage stress in the 12 months prior to interview.

Worsened in 2023.



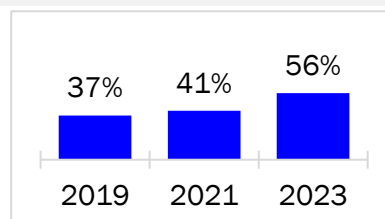
Strongly support social housing (using Council's definition)

Relatively stable over time.



Spend more than 30% of household income on housing costs.

Worsened in 2023.

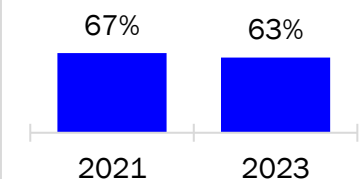


Environment and open space

Like to visit a local park or open space.

Not asked in 2019.

Relatively stable.



Ever visit parks or reserves.

First asked in 2023.

91%

Background

Introduction

Cardinia Shire's Liveability Plan 2017-29 has a long-term vision to improve the liveability of our local area and in turn, to improve health and wellbeing of all residents. One of the ways we track how well we are doing against this plan is to collect data across the plan's liveability domains and health outcomes.

While a variety of surveys and publicly available data sets exist to collect information at a state-wide level, we have limited information to help us plan at a township or suburb level, and there are some topic area gaps. This survey was designed to fill those gaps. Understanding the differences in liveability, health and wellbeing at a local level helps us track how the Liveability Plan is performing, as well as plan and advocate for the different needs across the Shire.

The 2023 research is the third time this survey has been employed. Much of the 2023 questionnaire remains the same as previous years (2019 and 2021) to enable tracking across time. There were also additional questions included on a range of topics relevant at the time.

The surveys haven't collected data for Employment or Education domains as there aren't any additional data needs at this stage (data is obtainable from other sources).

Methodology

For this research we employ a methodology that means every household in the Shire has an equal chance of being selected:

1. Extract full list of all occupied residential properties in the Shire from the rates database.
2. Randomly sample 6,278 households from this list, with proportional representation across all localities.
3. Match selected households to email addresses on file.
4. Selected owner occupier households with an email address (2,171) were sent an email invite to an online version of the survey, whilst those without an email address and non-owner-occupier households (4,107) were sent a paper version of the survey form in the mail, with the option to complete online.
5. Each household was assigned a unique code so they could only complete the survey once.

The survey was distributed on 30 June 2023 and closed on 30 July 2023. One reminder postcard was sent to those who received the paper survey, and one reminder email was sent to those who received an email invite.

In 2023 there were n=870 completed surveys, up from n=772 in 2021 and n=732 in 2019.

	Sent	Return to sender / bounced	Completed	Response rate
Mail	4,107	132	590	15%
Email	2,171	138	280	14%

Of the mail surveys sent out, 89 completed the online version (15% of completions) rather than the paper form.

Respondent Profile

The data in this section has not been weighted. Coverage is relatively in line with distribution as per the 2021 Census for gender, region and diversity measures, however there was an over-representation of older adults, primarily through the paper survey completion method, and an under-representation of renters. This has been corrected through weighting, so that the results more accurately represent the community.

		n=	%	2021 Census %
Gender	Female	464	53%	51%
	Male	370	43%	49%
	Self-describe	3	0.3%	N/A
	Refused / no answer	33	4%	N/A
Age	18-34	79	9%	33%
	35-49	251	29%	29%
	50-59	156	18%	15%
	60-69	166	19%	12%
	70+	190	22%	12%
	Refused / no answer	28	3%	N/A
Region	Growth	529	61%	69%
	Hills	201	23%	16%
	East	77	9%	8%
	South	63	7%	8%
Diversity	Speak Language other than English	123	14%	18%
	Identify as LGBTIQ+	21	3%	N/A
	Aboriginal or Torres Strait Islander	10	1%	1%
	Disability	57	7%	5%

Household profile

The survey coverage under-represents renters.

		n=	%	2021 Census %
Tenure	Own outright	346	40%	23%
	Own with mortgage	394	45%	36%
	Rent	79	9%	29%
	Other	2	0%	2%
	Refused / no answer	49	6%	5%
Household income	Up to \$450 per week	74	9%	N/A
	\$451-\$900/wk	168	19%	N/A
	\$901-\$2,000/wk	262	30%	N/A
	\$2,001-\$4,000/wk	125	14%	N/A
	\$4,001+/wk	19	2%	N/A
	Don't know	84	10%	N/A
	Refused / no answer	138	16%	N/A
Household type	One person*	55	15%	19%
	Couple with children	149	40%	38%
	Single parent	25	7%	12%
	Couple no children	99	27%	24%
	Other	24	7%	6%
	Refused / no answer	17	5%	N/A

Analysis notes

Thematic analysis

For the questions collecting a written answer, responses have been grouped into meaningful themes to assist with analysis. Where relevant, individual comments have been assigned to multiple themes. An excel document with this thematic analysis has been provided in a separate document and allows for filtering of comments by themes.

Statistical significance testing

Results have been tested for statistical significance using the Bonferroni method at 95% confidence level and takes into account the effective base for improved accuracy. Where a statistically significant variation has been identified in the analysis, this has either been included in a written comment or demonstrated in charts and tables with arrows denoting a higher than average result (↑) or lower than average result (↓). To ensure relevance and usefulness of this report, cross analysis of variables which do not yield any statistically significant insights have not been included in the written analysis.

All findings have had significance testing conducted based on:

- Gender;
- Age;
- Culturally and Linguistically Diverse (speak a language other than English);
- Disability (Person with a disability or carer of a person with a disability);
- LGBTIQ+ (identify as LGBTIQ+ and/or non-binary gender); and
- Region.

Weighting

Data was weighted by gender, age and region (interlocking) to align to 2021 Census distribution. Due to no responses in the South region amongst males aged 18-34, the weight for this cell was attributed to males 35-49 in this region. The highest weighting value was 8.3 for 18-34 year old males in the Hills region and the lowest was 0.3 for 70+ year old males in the East region.

Tracking data

Where possible, results have been compared to 2021 and 2019 survey results. All years have been weighted to 2011 Census data (interlocking) by age, gender and region.

Glossary

CALD	Culturally and linguistically diverse (defined as those who speak a language other than English at home)
LGBTIQ+	Lesbian, gay, bisexual, transgender, intersex, queer/questioning, asexual
LOE	Language other than English
n=	The number of respondents who contributed to the reported percentages (base number)
N/A	Not applicable
Respondent	Those who participated in the survey.
Sample size	The number of people who provided an answer to the question.
Statistically significant	Highlights a phenomenon / variation in the data that one can be confident is reflective of the entire target population. For more information see previous section.
Thematic analysis	Grouping of written comments into themes to assist in analysis. See previous section.

Outcomes

Improving the health and wellbeing of communities requires a long-term vision, as changes in attitudes, behaviours and cultures are mostly seen over generations. This following sections cover data specific to the Liveability Plan outcomes, to help identify any issues in a timely manner that may hinder the achievement of our long term goals.



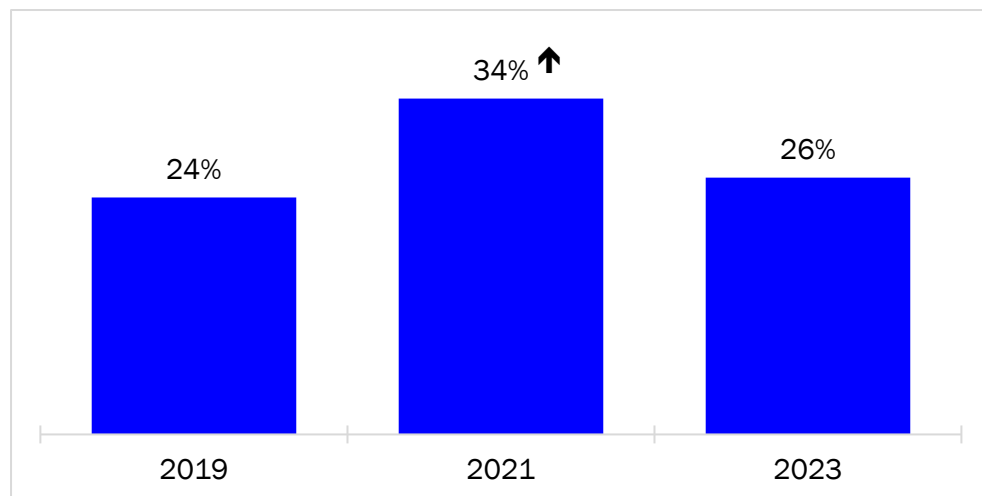
Improve mental health and wellbeing

Liveability Plan 2017-29 Objectives

- 1.1 Increase access to equitable mental health services.
- 1.2 Increase resilience of communities to adapt and thrive.
- 1.3 Increase connection to and involvement in nature.

The incidence of community members experiencing mental health issues (self or family) increased in 2021, in line with COVID-19 lockdowns, and has since returned to a similar incidence as that recorded pre-COVID-19. This compares to research conducted by Cardinia Shire Council in 2016 which shows a 20% incidence of mental health issues in rural areas of the municipality, and 19% in the Growth region.

Figure 1 Incidence of mental health issues having a negative impact on respondent or their family



In 2023, experiencing mental health issues (self or family) was reported by higher proportions of:

- Under 35 year olds (34%, compared to 15% 60-69 and 8% 70+ year olds).
- Renters (34%) and those with a mortgage (28%, compared to 18% of those who own a house outright).

In terms of accessing mental health services, this has remained relatively stable, at 16% in 2021 and 15% in 2023 (not asked in 2019).

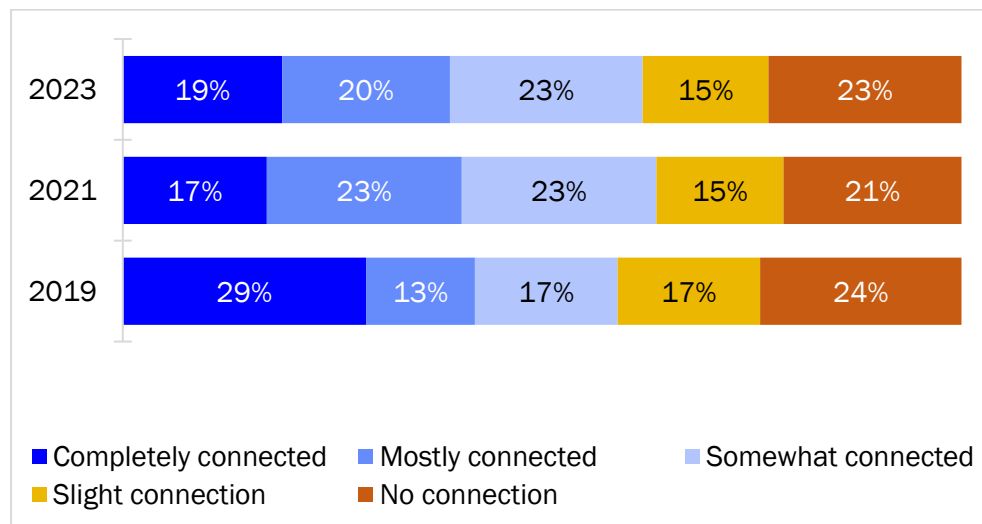
The incidence of accessing mental health services in 2023 was higher amongst:

- Females (20%, compared to 10% males).
- Under 35 year olds (20%, compared to 6% 70+ year olds).
- Renters (24%, compared to 10% of those who own their home outright).
- One person households (32%) and single parents (32%, compared to <10% of couples with or without children).

In 2023, only 35% of respondents accessing mental health services did so within Cardinia Shire. Higher instances of accessing mental health services within Cardinia Shire were evident amongst respondents residing in the South (63%) and Growth (36%) regions (compared to 9% Hills and 0% East).

Perceived connection to 'the land you live on' was higher in 2019; it dropped notably in 2021 and has since remained at this lower level of connection.

Figure 2 Connection to the land you live on, over time



Back when the connection was higher in 2019, more people felt the level of connection was about right (69%). Since the drop in connection there has been a shift to perceiving it to be not enough (21% in 2021 and 2023).

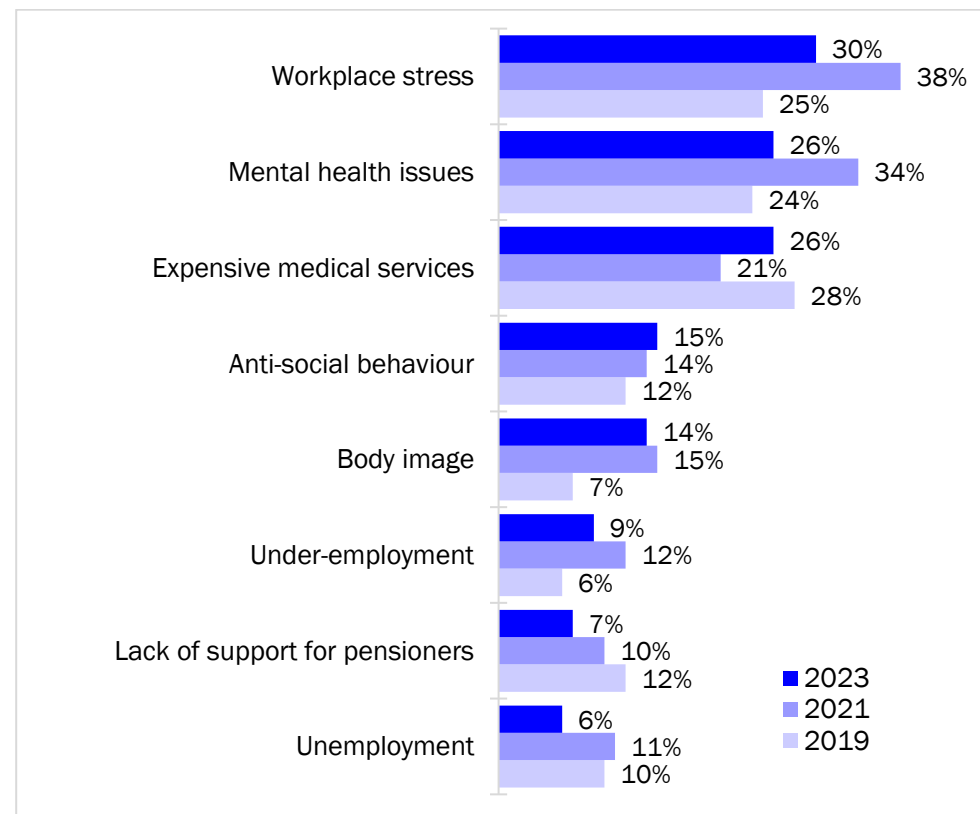
In 2023 the incidence of feeling no connection to the land they live on was higher amongst residents in the growth region (28%, compared to 9% of those in the Hills region), and renters 93%, compared to 20% own outright and 22% own with mortgage).

Demographics reporting higher instances of not enough connection to the land they live on were:

- Under 35 year olds (28%), 35-49 year olds (25%), compared to <10% 60+ year olds.
- Renters (42%, compared to 13% own outright and 21% own with mortgage).

Additional life stress indicators measured through this survey show that experiences of workplace stress and mental health issues increased during COVID-19 but have since returned to pre-COVID-19 levels. Conversely, expensive medical services declined during COVID-19, and have since increased to pre-COVID-19 levels.

Figure 3 Negative personal or family experiences in the 12 months prior to interview, over time



For further data about involvement in nature, see the Environment and open space section of this report.

Improve social cohesion

Liveability Plan 2017-29 Objectives

- 2.1 Increase social connection within and between neighbourhoods.
- 2.2 Increase sense of belonging and acceptance.
- 2.3 Increase community volunteering and participation.

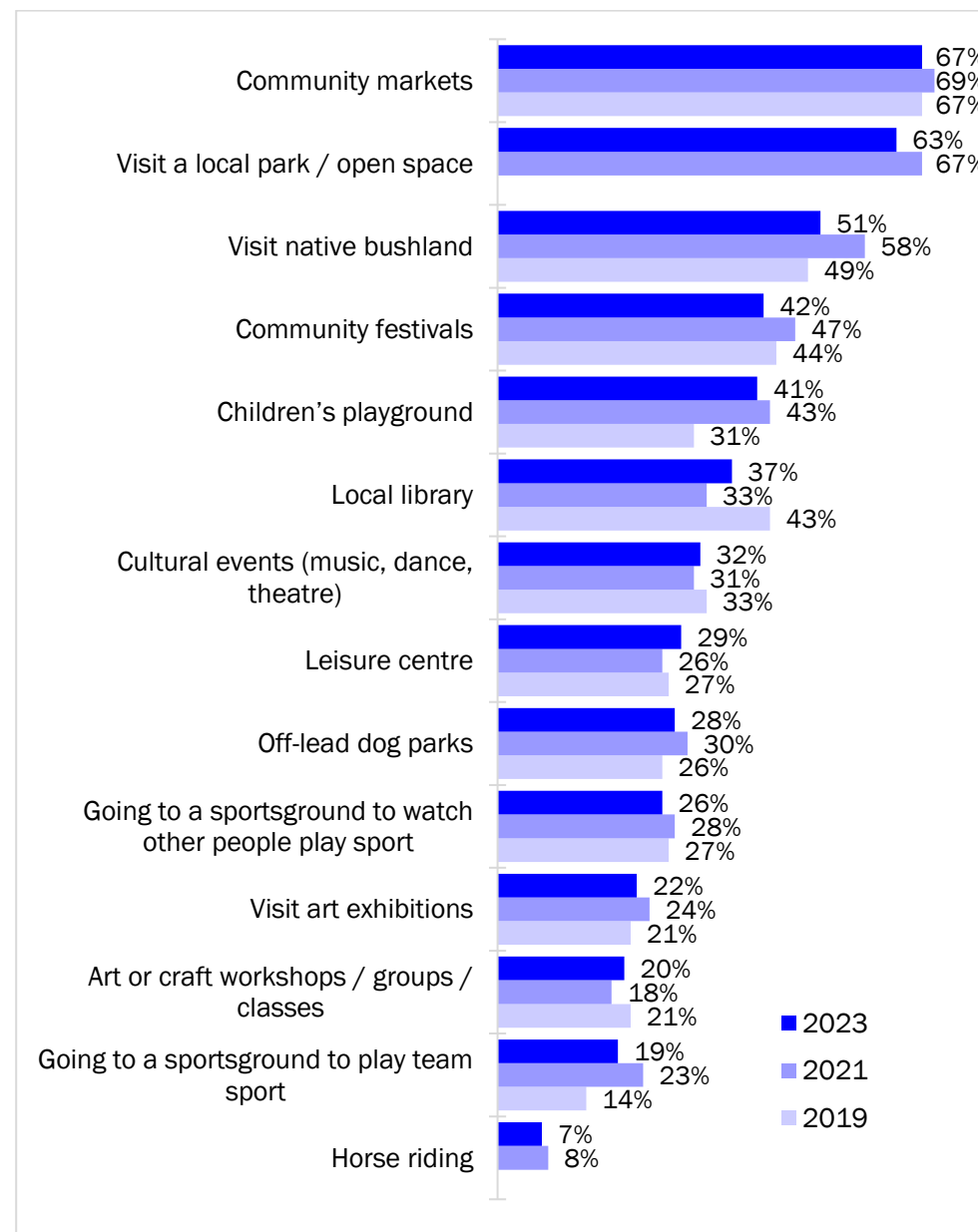
Research findings provide some insight into the types of activities residents participate in that might give them the opportunity for improved social cohesion. Over the last five years the main activities residents like to participate in have consistently been community markets, visiting local parks and open space and visiting native bushland.

Visitation to outdoor spaces increased during COVID-19 lockdowns, but has since declined back to levels similar to pre-COVID-19.

When analysing the 2023 findings by demographics a number of notable variations in preference for social and outdoor activities were evident:

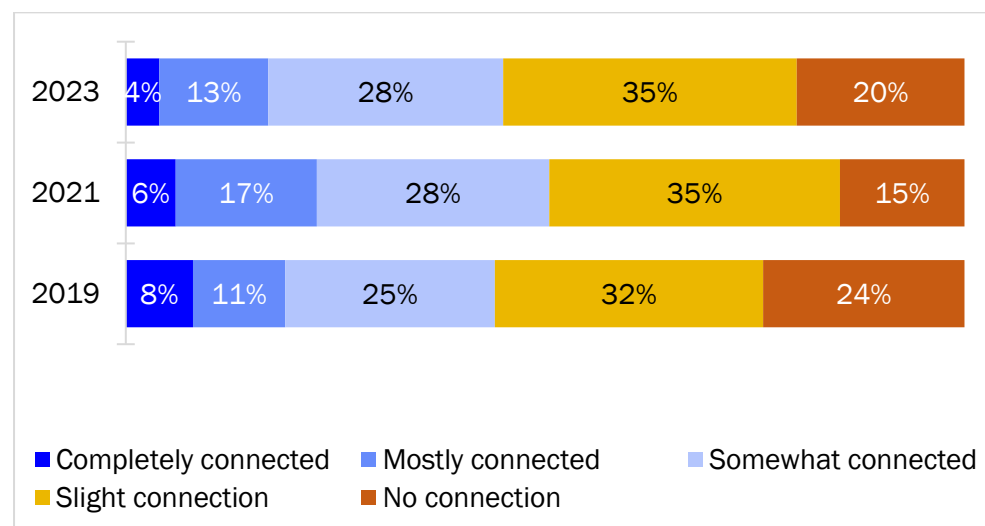
- Females more often undertake all activities than males.
- Going to a sportsground to play team sport is more common amongst those in the South region (45%), and 35-49 year olds (32%).
- Community festivals were more commonly selected by those in the Growth region (45%), those aged under 35 (44%) and 35-49 (53%), and those who speak a language other than English (57%).
- Those who speak English only, more often say they like to visit off-lead dog parks (32%, compared to 14% LOE).

Figure 4 Activities people like to participate in



During the height of the COVID-19 pandemic (2021) sense of connection to the community improved, but has since returned to lower than pre-COVID-19 levels.

Figure 5 Connection to the local community, over time



In 2023, a notably high instance of indicating no connection to the local community was recorded amongst renters (33%), those in the South (26%) and Growth (23%) regions, and males (23%).

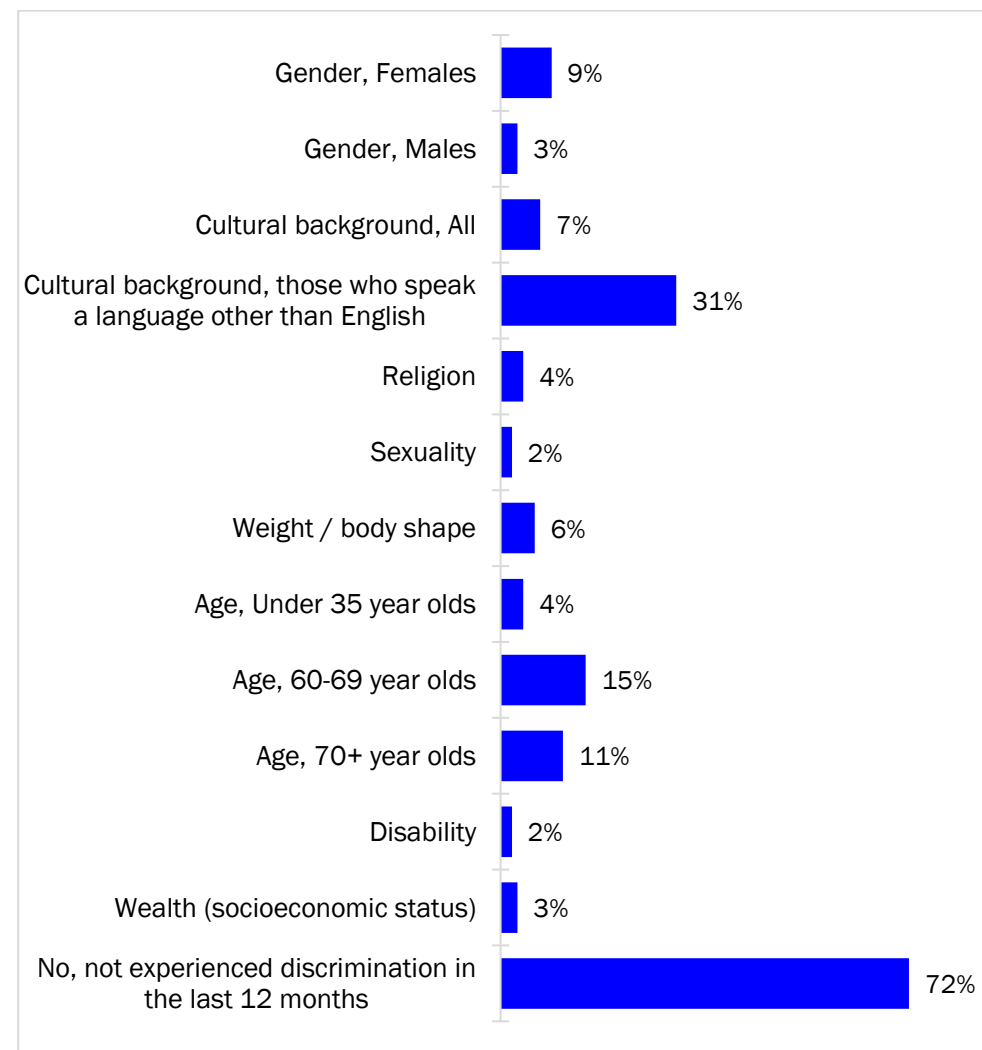
A follow-up question sought to identify if the sense of connection to the local community was too much, about right or not enough. Findings have been relatively consistent over time, with 27% saying 'not enough' in 2023 (compared to 29% in 2021 and 26% in 2019).

In 2023, a number of demographic sub-groups showed notably high instances of answering 'not enough' connection:

- Growth region (32%).
- Under 35 year olds (34%).
- Those who speak a language other than English (37%).
- Those who own their property with a mortgage (32%).

In 2023 a new question was added to understand experiences of discrimination. Overall, 23% of respondents indicated they had experienced some form of discrimination, with almost a third of those who speak a language other than English indicating they had experienced discrimination.

Figure 6 Experiences of discrimination, 2023



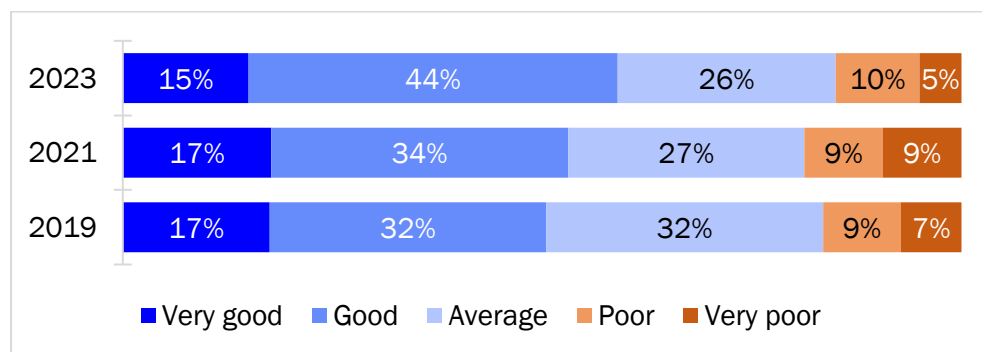
Improve safety

Liveability Plan 2017-29 Objectives

- 3.1 Increase road, pedestrian, and cyclist safety.
- 3.2 Increase perceptions of safety.
- 3.3 Increase preparedness for climate hazard events.
- 3.4 Reduce crime and anti-social offending.
- 3.5 Reduce injury in public places.

Most respondents who said they use footpaths in Cardinia Shire rate their level of safety as very good or good. This has been increasing steadily over time, from 49% good and very good combined in 2019, to 59% in the current survey.

Figure 7 Rating of footpaths as safe to use, over time

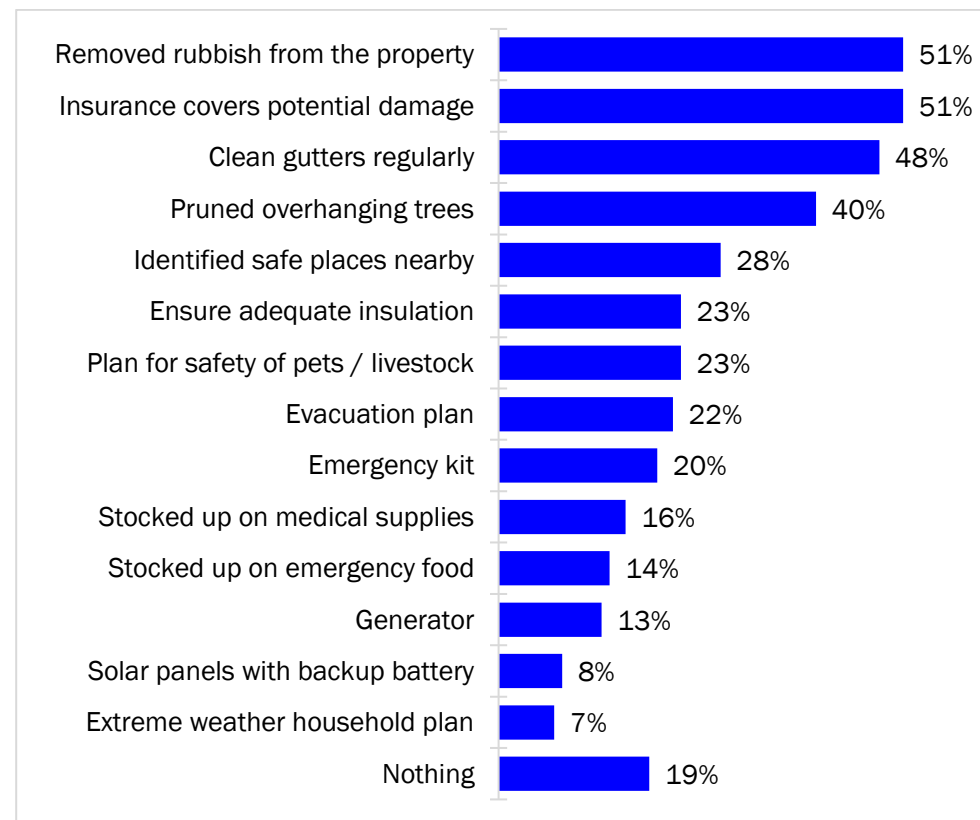


In 2023 those in the East region showed a high instance of rating footpath safety as very poor (23%).

In 2023, 19% reported themselves or a family member experiencing crime or safety issues in the 12 months prior to interview, remaining at a similar level to 2021 (18%), yet still lower than 2019 (24%). Furthermore, the incidence of experiencing dangerous driving has been decreasing over time (from 26% in 2019 to 14% in 2023).

In 2023, a question was added to help understand preparedness for extreme weather events. The most common preparation amongst Cardinia Shire residents are adequate insurance coverage, removing rubbish and cleaning gutters; although only half say they do these things, and almost one in five respondents said they had done nothing.

Figure 8 Extreme weather event preparations, 2023



The incidence of having done nothing to prepare for extreme weather events was higher amongst those in the Growth region (26%), 35-49 year olds (25%), people who speak a language other than English (29%), renters (36%), and single parents (47%).

Improve healthy eating and active living

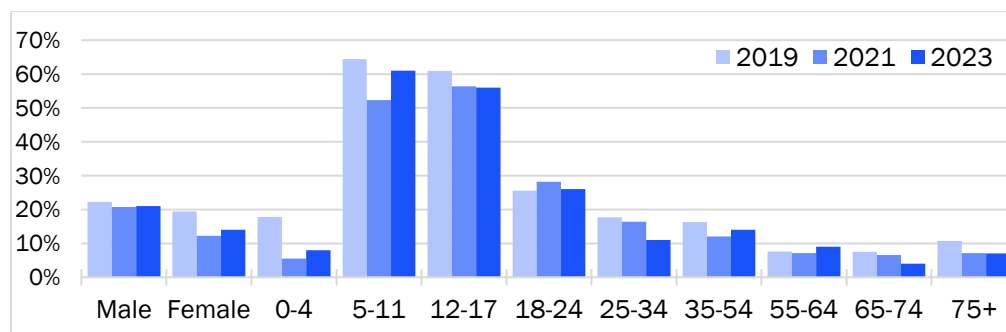
Liveability Plan 2017-29 Objectives

- 4.1 Increase sustainability and resilience of the local food system.
- 4.2 Increase consumption of fresh produce and drinking water.
- 4.3 Increase walking and cycling for transport.
- 4.4 Increase participation in active leisure, recreation and sport.

The survey included a section where respondents could fill in information about each member of their household, to provide insights across all age ranges.

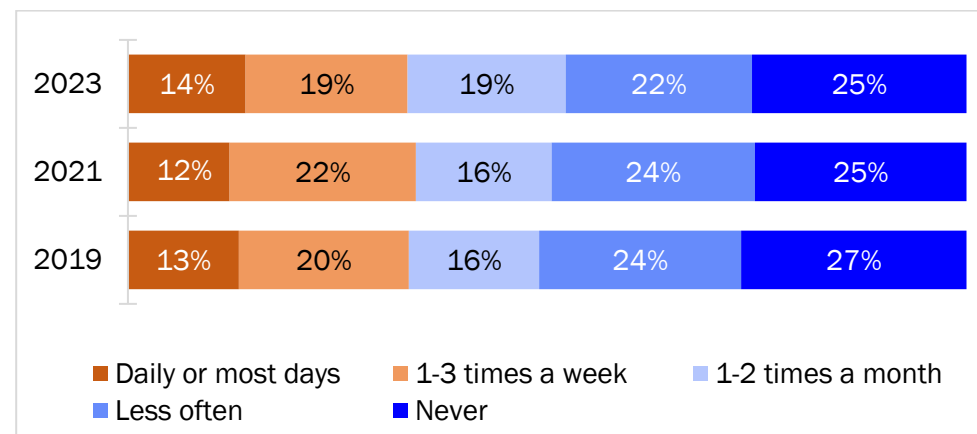
The incidence of playing organised sport fell notably during COVID-19 (from 21% in 2019 to 16% in 2021), particularly amongst females, 5-11 year olds and 25-34 year olds. The 2023 data remains low overall (17%) yet shows some recovery amongst 5-11 year olds. However there has been a continued decline in participation amongst 25-34 year olds.

Figure 9 Incidence of playing organised sport by gender and age, 2023



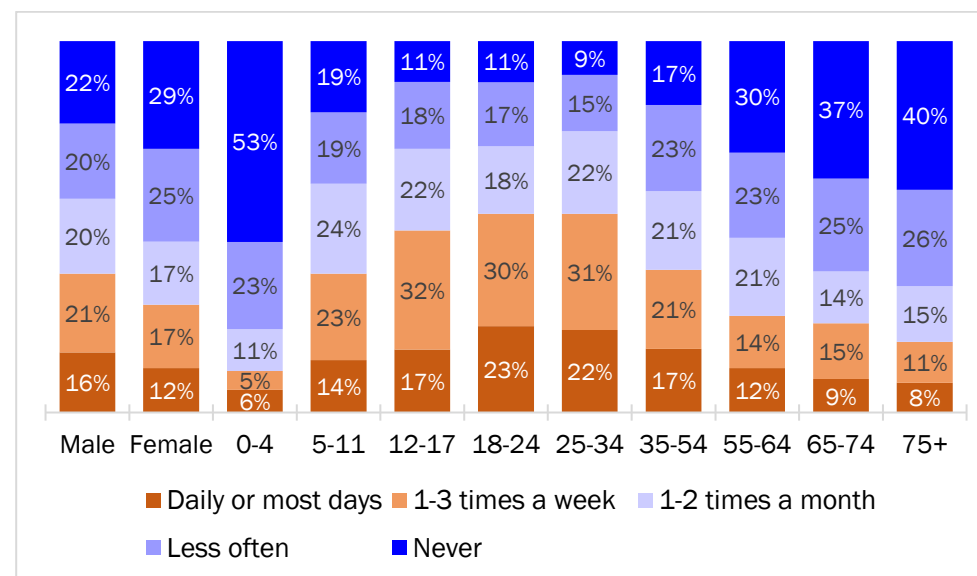
The individual household member section of the survey also asked about healthy eating behaviours. Consumption of sugar sweetened drinks has remained relatively constant over time.

Figure 10 Frequency of consuming sugar sweetened drinks, over time



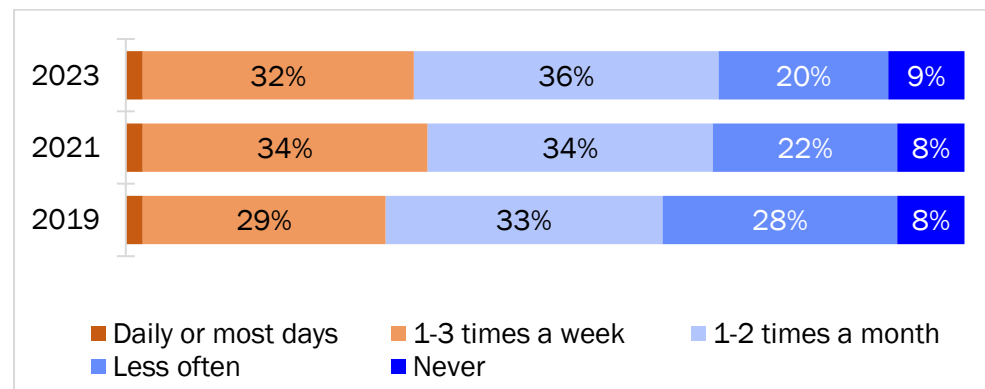
In 2023, consumption of sugar sweetened drinks was more frequent amongst males and 12-34 year olds.

Figure 11 Consumption of sugar sweetened drinks by gender and age, 2023



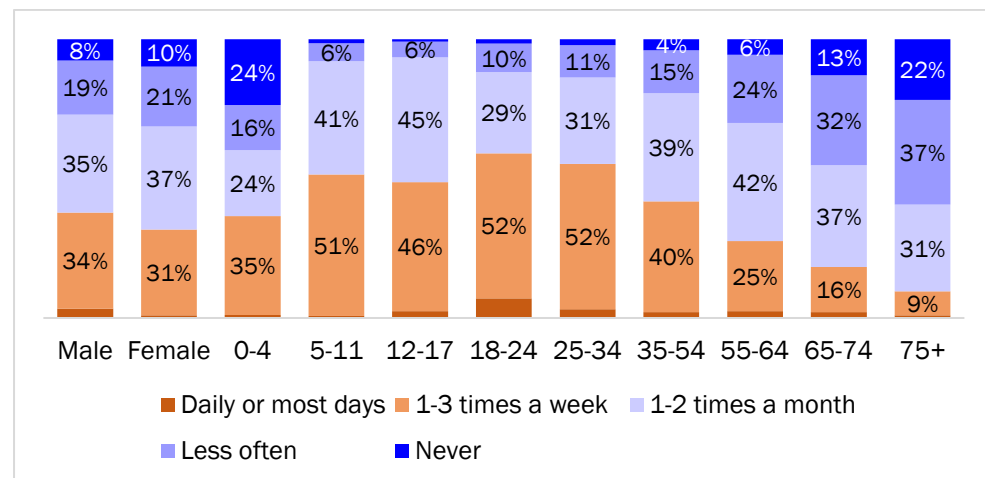
The frequency of consumption of fast food increased during COVID-19, and has remained higher than it was in the late 2010s.

Figure 12 Frequency of consuming fast food, over time



In 2023, consumption of fast food was more frequent amongst males and 12-34 year olds, reducing as people age.

Figure 13 Consumption of fast food by gender and age, 2023



The survey also asks how many serves of fruit and vegetables are consumed by each household member. A calculation is then conducted using the Australian dietary guidelines² to determine whether they eat the recommended daily amount of fruit and vegetables, as follows:

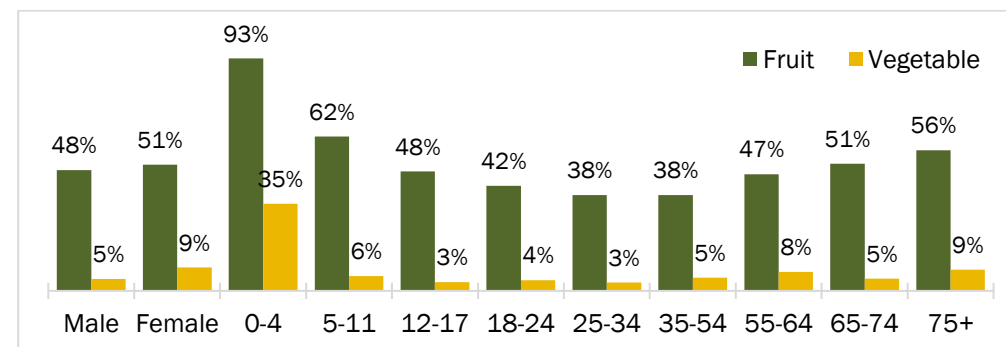
Table 1 Matrix used to calculate whether serves of fruit and vegetable consumption guidelines are met

Age	Vegetables	Fruit
2-3 years (0-4)	2 ½	1
4-8 years (5-11)	4 ½	1 ½
12-18 (12-17) boys, 51-70 (55-74) men	5 ½	2
9-11 years, 12-18 girls, 70+ men, 19+ women	5	2
19-50 men	6	2

Across the three surveys, the proportion of residents who meet these guidelines has remained relatively constant, with half (49-51%) meeting the fruit consumption guidelines and 7% meeting the vegetable consumption guidelines.

In 2023, a higher proportion of females met these guidelines. Furthermore, meeting guidelines is higher amongst children and older adults.

Figure 14 Incidence of meeting fruit and vegetable guidelines by gender and age, 2023



² https://www.eatforhealth.gov.au/sites/default/files/2022-09/n55_australian_dietary_guidelines.pdf

The proportion of residents who like to visit leisure centres is consistently at just above a quarter, reaching 29% in 2023. In 2023, using leisure centres was specified as a liked activity by higher instances of:

- Those in the Growth region (35%).
- 35-49 year olds (42%).
- Those who speak a language other than English (41%).

Additional data relating to this topic can be found in the Food section of this report.

Reduce family violence

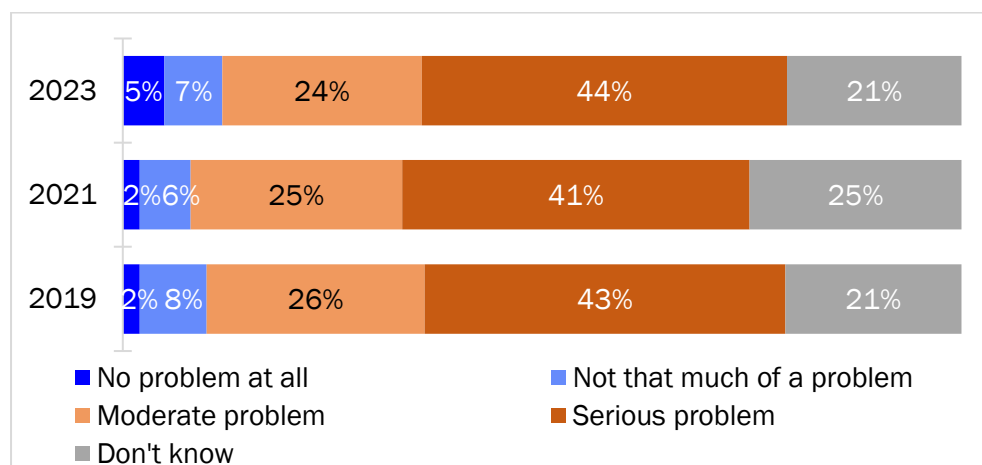
Liveability Plan 2017-29 Objectives

- 5.1 Increase awareness and attitudes towards gender equality.
- 5.2 Increase capacity of individuals, organisations, and communities to promote respectful relationships.
- 5.3 Increase social support and services for people experiencing family violence.

Note that this survey collects data on community perceptions, it does not tell us what the rate of family violence is. Rates can be found at crimestatistics.vic.gov.au.

In 2023, the incidence of respondents rating family violence as no problem at all increased notably, to 5%, up from 2% in previous years. However, the proportion who rate family violence as a serious problem hasn't changed over time, suggesting this represents a shift away from moderate views.

Figure 15 Perceptions of the topic of family violence in the community, over time

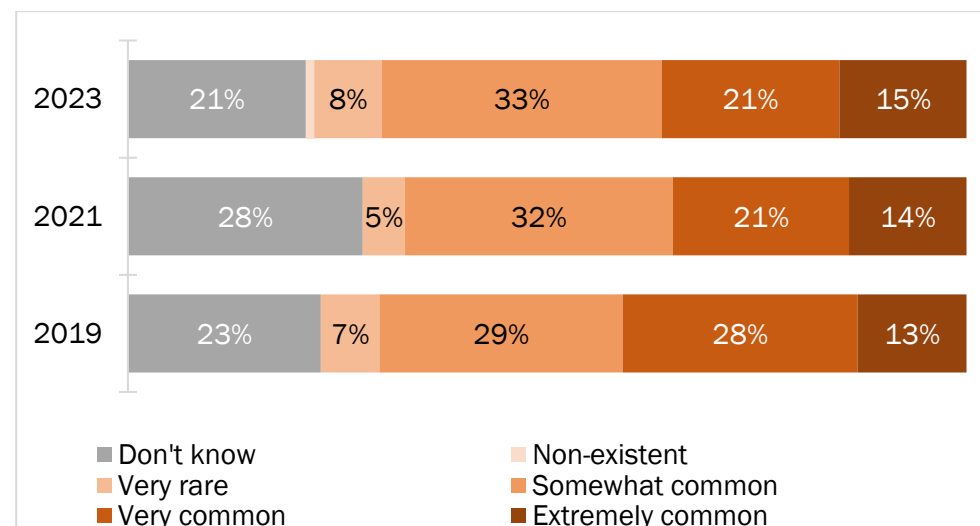


In 2023, rating the topic of family violence in the community as not at problem at all was more common amongst those in the East region (15%). Furthermore,

females more commonly rated it as a serious problem (46%) than males (39%).

In 2021 there was a reduction in the perception of how common family violence was (fewer saying very or extremely, and more saying somewhat). This has become more pronounced in 2023 (with more saying non-existent).

Figure 16 Perceptions of the common-ness of family violence in the community, over time



When analysing findings by demographics, in 2023 a notably high proportion of males rated the common-ness as very rare (11%, compared to 5% females), as did those who speak a language other than English (15%, compared to 6% English only).

In 2023, 2% of respondents said that family violence had had a negative impact on themselves or their family in the 12 months prior to interview, down from 3% in 2021 and 2019. Furthermore, in 2023, 1% said they had used family violence support services in the 12 months prior to interview, a similar proportion to that recorded in 2021 (not asked in 2019). In 2023, more than half (57%) of those who said they had used family violence support services accessed services outside of the Shire.

Improve financial wellbeing and resilience

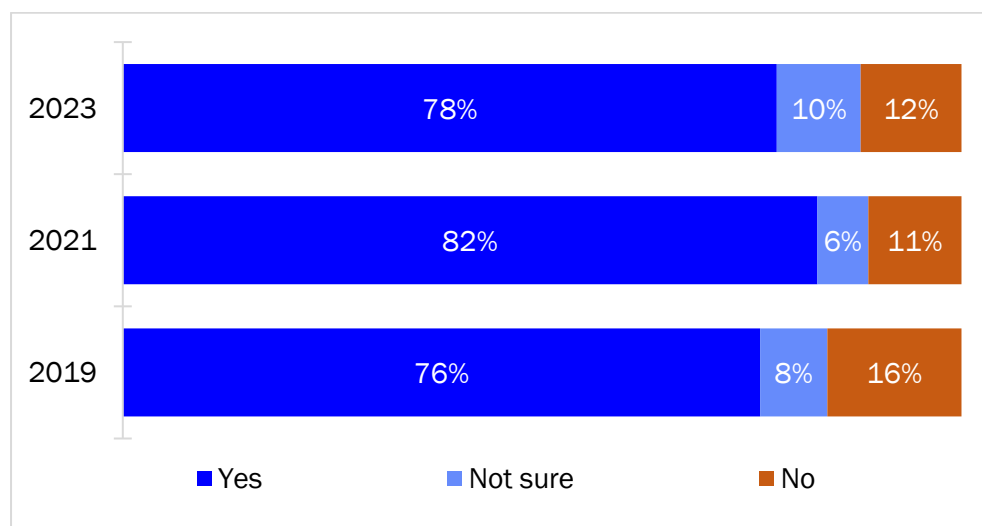
Liveability Plan 2017-29 Objectives

- 6.1 Decrease the costs of living in growth areas related to liveability.
- 6.2 Increase financial literacy and access to financial support services.
- 6.3 Increase environmentally sustainable living practices.

Further data about financial wellbeing, specific to household stress, can be found in the Housing section of this report.

During the height of COVID-19 (2021), there was an increase in the proportion of respondents reporting that they have someone outside the household who could care for themselves or their children in an emergency. This has since dropped back down to almost pre-COVID-19 levels.

Figure 17 If someone outside household who can care for person or children in an emergency, over time



The incidence of having someone who can care for a person or their children in an emergency is higher amongst females (81%, 75% males), younger people (84% under 35 year olds, compared to 70% 50-59 year olds), and couples with children living at home (83%, compared to 54% single parents).

In 2023, respondents were asked to indicate which of a range of actions their household currently undertakes, or plans to undertake in the two years after interview. This data can help us understand environmentally sustainable living practices.

Relatively high proportions of households compost food waste, seek out locally produced fruit and vegetables, plant native plants and avoid plastic packaging. However, there has been relatively little uptake (or intention to start) for using public transport, consuming less animal products or electric vehicles.

Some notable variations by demographics are:

- **Solar panels on roof** – more common amongst those in the South region (55%, compared to 32% Hills), Those who speak a language other than English (61%, compared to 36% English only), those who own their property (51% outright, 42% mortgage, compared to 9% renters), and couples with children at home (56%, compared to 26% single parent).
- **Walk ride or scoot for local trips** – more common amongst those in the Growth region (48%, compared to 31% Hills).
- **Use public transport** – more common amongst those in the Growth region (29%, compared to <15% other regions), those who speak a language other than English (40%, compared to 21% English only), and renters (42%, compared to 25% own outright and 21% own with mortgage).
- **Plant native plants** – more common in hills (67%) and East (71%) regions (compared to 46% Growth), 7+ year olds (73%, compared to 35% under 35s), those who speak English only (54%, compared to 44% LOE), those who own their house outright (69%, compared to 20% renters).
- **Buy local fruit/vegetables** – more common amongst those in the South (73%) and East (79%) regions (compared to 51% Growth), 70+ year olds (75%, compared to 47% under 35 year olds).
- **Consume less/no food from animal sources** – more common amongst females (23%, 14% males), and those in the Hills region (30%, compared to 15% Growth).

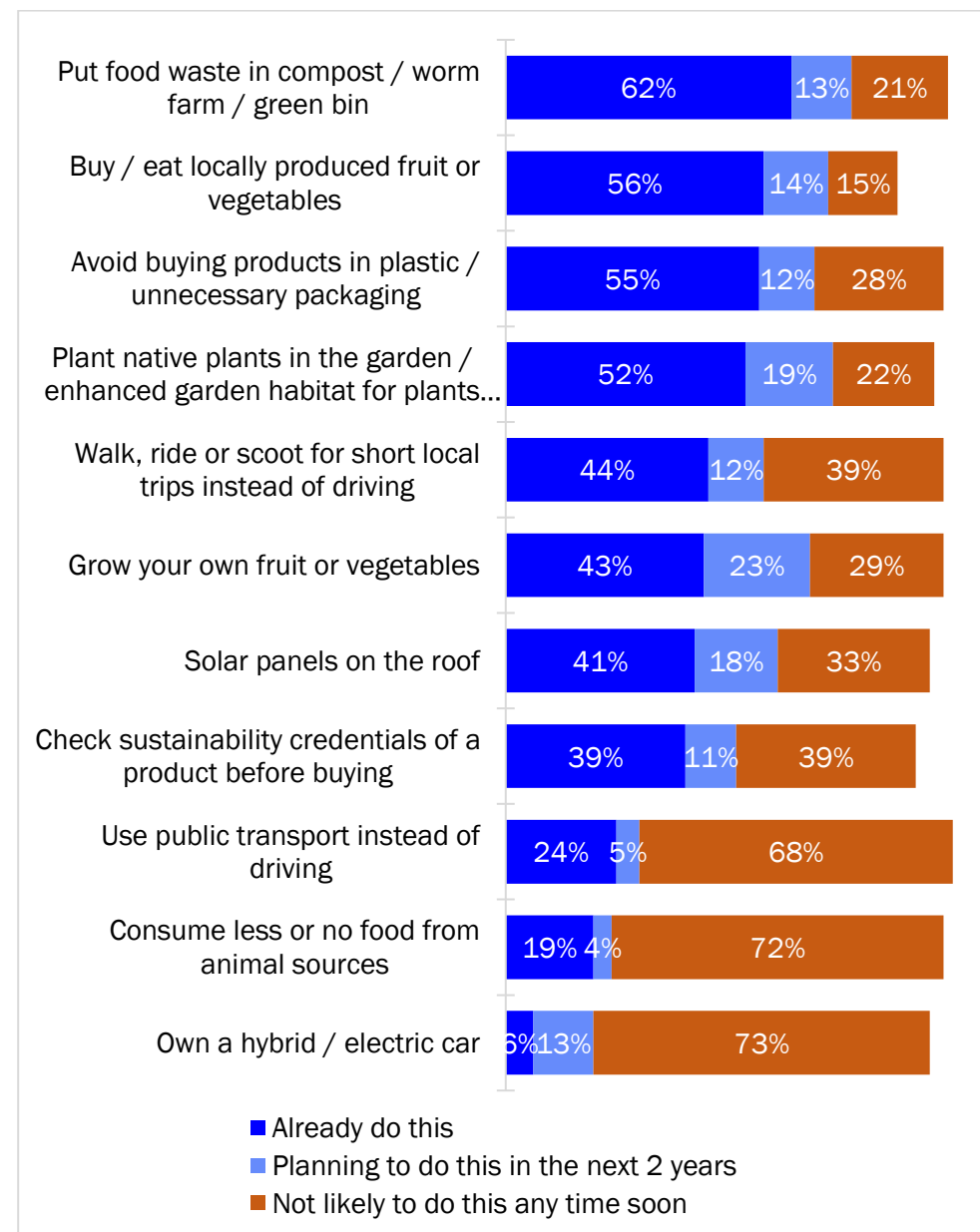
- **Check sustainability credentials before buying** – more common amongst females (44%, 34% males), 70+ year olds (56%, 35% under 35s), and those who own their home outright (49%, 36% own with mortgage).
- **Avoid plastic packaging** – more common amongst those living in the Hills (61%) and East (65%) region (compared to 36% South), females (60%, 48% males), those who speak a language other than English (65%, 53% English only).
- **Grow own fruit/veggies** – more common amongst those who live in South (57%), Hills (54%) and East (69%) region (36% Growth), and those who own their home outright (54%, compared to 43% own with mortgage and 21% renters).
- **Compost** – more common amongst females (65%, 56% males), older adults (78% 60-69 and 81% 70+ compared to 50% under 35), and those who own their house outright (78%, compared to 56% with a mortgage and 52% renters).

In general, females more often carry mental load regarding sustainable behaviours.

In both 2021 and 2023, 4% of respondents indicated they had accessed financial support services in the 12 months prior to interview. In 2023, the incidence of accessing financial support services was higher amongst those in the South region (9%, compared to 1% Hills) and single parents (15%, compared to 2% couples with children and 1% couples without children). Over half (55%) of those accessing financial support services did so through a service outside of the Shire.

The incidence of indicating they or a family member had experienced a negative impact from financial difficulties or issues in the year prior to interview increased to 23% in 2023, up from 18% in 2021.

Figure 18 Climate impact minimisation behaviours, 2023



Reduce harm from tobacco, alcohol, drugs, and gambling

Liveability Plan 2017-29 Objectives

- 7.1 Decrease exposure to smoking.
- 7.2 Decrease short and long-term impacts of alcohol and drug use.
- 7.3 Decrease harm from gambling among individuals and communities.

In the section of the survey designed to collect data for all household members (of all ages, not just the respondent), findings suggest that the proportion of residents of all ages who smoke (cigarettes or vape) has been a relatively stable 9% over the last 3 years (not asked in 2019). However, there has been a shift towards vaping (3% in 2023, compared to 1% in 2021) and away from smoking (6% in 2023, 7% in 2021). In 2023 the vaping answer option was split into with and without nicotine, with more saying they vape with nicotine (2%) than without (1%).

When analysing smoking data by demographics the following notable variations were evident:

- Males more often smoke cigarettes (7%, compared to 5% females).
- 18-24 year olds more often smoke vapes with nicotine (6%) and vapes without nicotine (5%).
- 25-34 year olds more often vape with nicotine (6%), but seldom vape without nicotine (1%).
- 55-64 year olds had the highest incidence of smoking cigarettes (13%), while only 1% vape (with nicotine).

In 2021 and 2023, the individual section of the survey also collected data about alcohol consumption. In 2023 there was a reduction in the proportion of adults who said they drink daily or most days (11%, down from 14% in 2021), as well as a reduction in binge drinking (17% drank 4+ drinks per session in 2021, dropping to 13% in 2023).

The 2023 data shows that frequent consumption of alcohol is more common amongst older adults, however when they do drink they drink fewer per

session. Furthermore, males more often drink alcohol, and when they do they tend to have more drinks per session.

Figure 19 Frequency of consumption of alcohol by gender and age, 2023

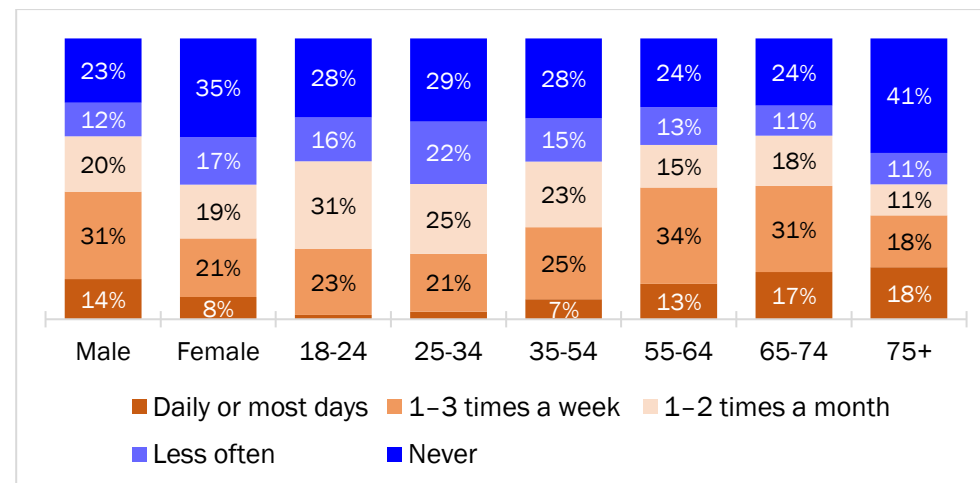
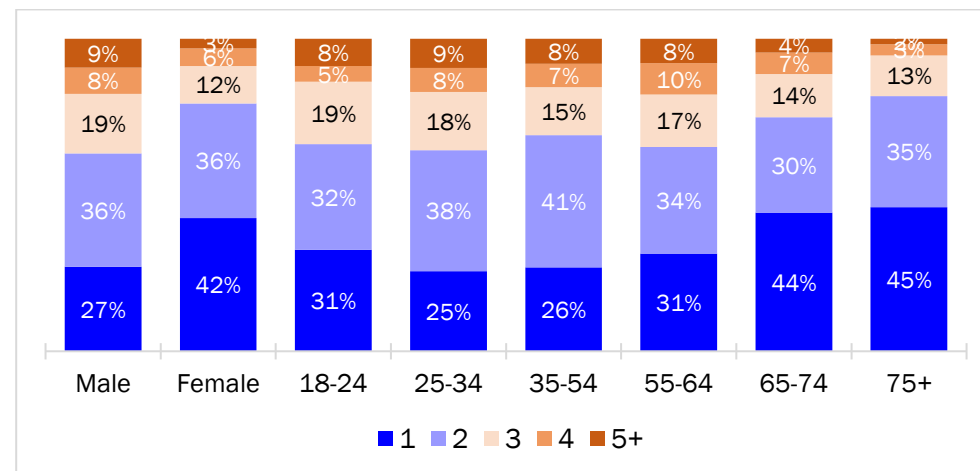
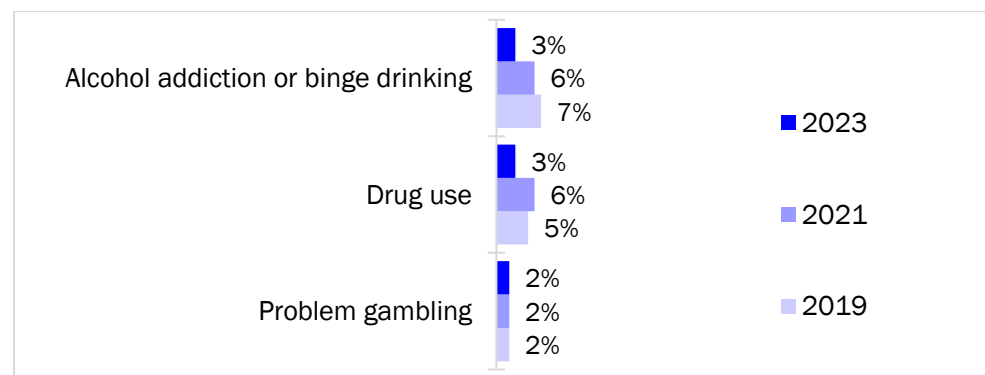


Figure 20 Number of drinks consumed per session (of those who drink) by gender and age, 2023



Findings show that over time the proportion of households impacted by alcohol addiction or binge drinking has been declining, whilst 2023 also saw a drop in the proportion experiencing issues relating to drug use. The proportion experiencing problem gambling issues has remained relatively constant over time.

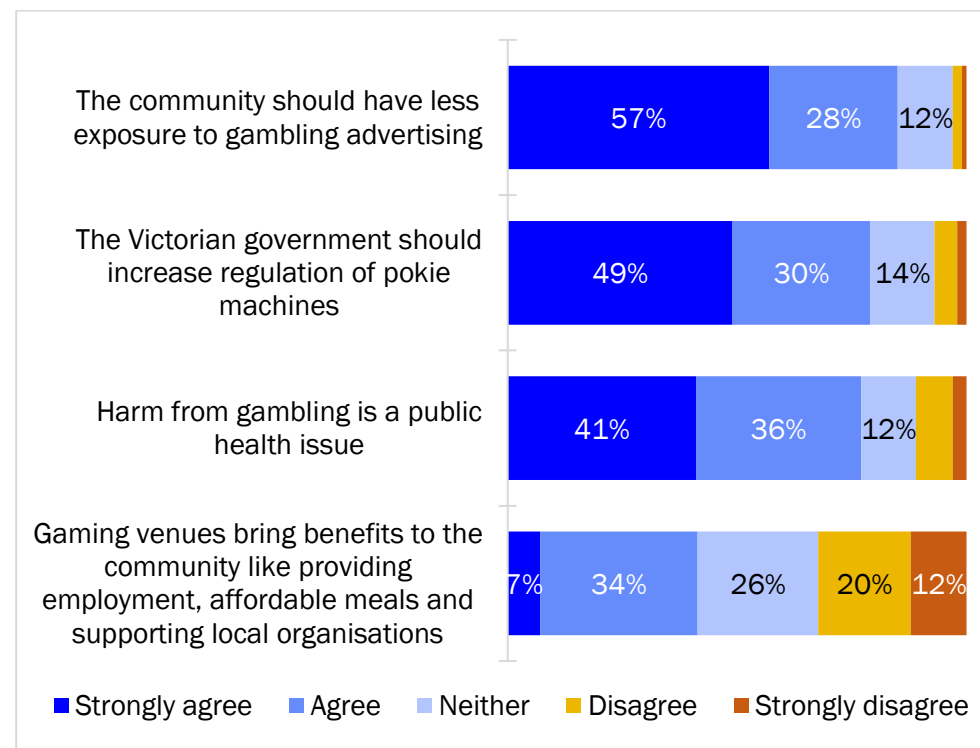
Figure 21 Negative impact on self or family in 12 months prior to interview, over time



Only 1% of respondents said they had accessed alcohol and drug rehabilitation services in 2023 and 2021. In 2023, when accessing these services, most did so outside of Cardinia (69%).

In 2023 additional questions were included relating to gambling in Cardinia Shire. It was found that most agree that the community should have less exposure to gambling, that there needs to be more regulation of pokie machines, and that harm from gambling is a public health issue. Furthermore, almost a third (32%) disagree that gaming venues bring benefits to the community.

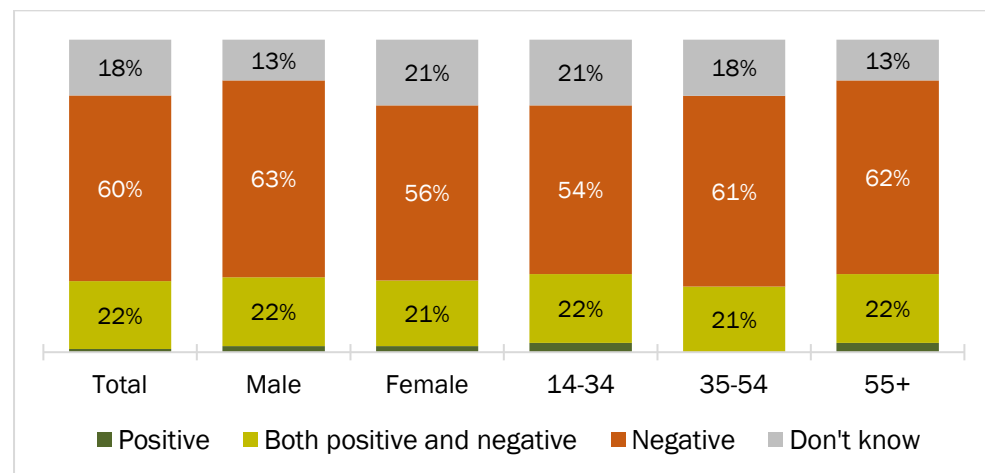
Figure 22 Perceptions regarding gambling and the community, 2023



Stronger levels of agreement that the community should have less exposure to gambling advertising was evident in the Hills region (63% strongly agree, compared to 41% South), amongst males (61%, compared to 54% females), 60-69 year olds (71%, compared to 50% under 35s), and those who speak a language other than English (66%, compared to 56% English only),

In 2021 the Liveability survey asked households to indicate whether they thought pokies have a positive or negative impact on their local community. It was found that most felt they had just a negative impact.

Figure 23 Perceived impact of pokie machines on the local community, 2021



In the 2021 survey, when asked to write in the positive and negative impacts, 169 respondents wrote in something positive, and 497 wrote in something negative. The main positive impacts stated were (% of all respondents, not just those who wrote in an answer):

- Community connection (9%);
- Entertainment (5%);
- Bring money / people to the area (3%);
- Donations to the community / sport (3%); and
- Employment (3%).

The main negative aspects mentioned were:

- Addiction (including problem gambling) (30%);
- Financial problems (24%);
- Family impacts (12%);
- Targets vulnerable (8%);
- Family violence (5%);

- Mental health (4%); and
- Antisocial (4%).

In 2023, seven percent of respondents indicated they had a personal experience of gambling harm, whilst 22% said that a close friend or family had experienced gambling harm (some may fall within both groups). Overall, 26% said they had experienced gambling harm to either themselves or a close friend or family member.

Figure 24 Experiences of gambling harm, 2023



Those who speak a language other than English more often experienced one or more of these types of harm themselves (13%, 7% English only) and/or through a friend or family member (29%, 21% English only).

Domains

Liveable communities are regarded as “safe, attractive, socially cohesive and inclusive, and environmentally sustainable with affordable housing linked via public transport, walking and cycling to employment, education, public open space, local shops, health and community services, and leisure and cultural opportunities.” (Place, Health and Liveability, Melbourne University)

This section outlines data relating to a variety of planning and infrastructure topics that can contribute towards liveability.



Active Travel

The Liveability Plan strategic indicator for Active Travel is “Increase access to and connectivity of public transport, cycling routes and footpaths.”

In 2021 there was a notable increase in the proportion of residents using footpaths and/or shared bike paths daily, and this increased frequency continued in 2023.

Figure 25 Usage of paths daily or most days, over time

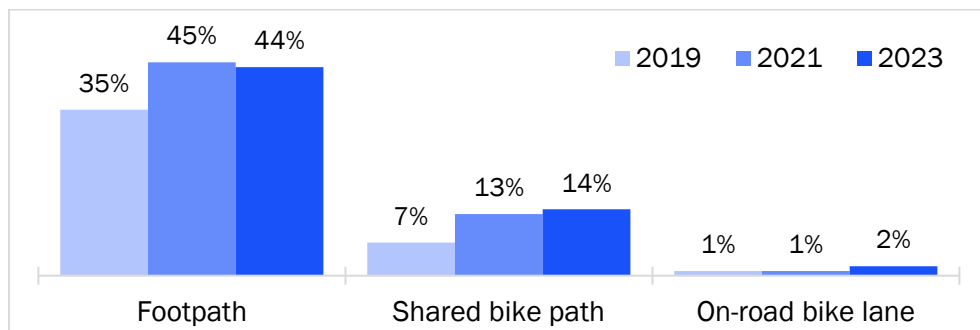
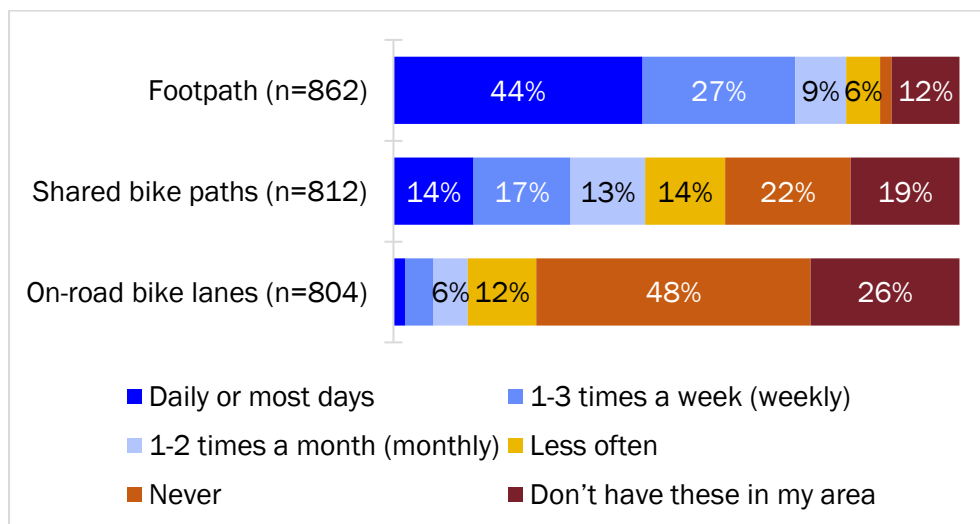


Figure 26 Frequency of using paths in the local area, 2023



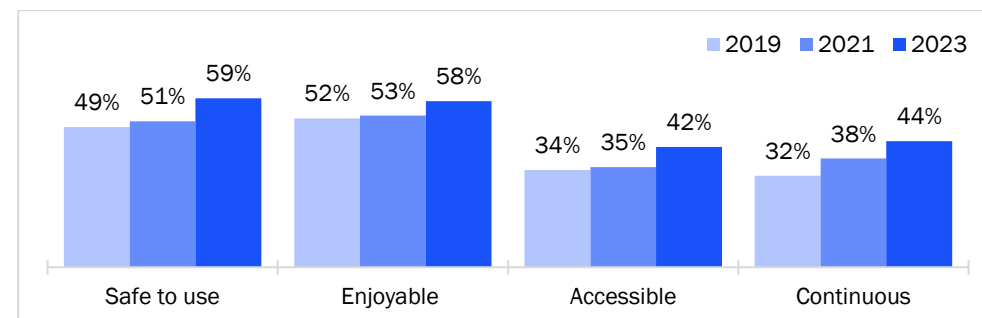
High instances of “Don’t have these in my area’ for were recorded for all three types of paths in the South, Hills, and East regions.

In the Growth region, 45% of residents use footpaths daily or most days and 49% use shared bike paths (off-road) monthly or more often. More than half (57%) of Growth region residents never use on-road bike paths.

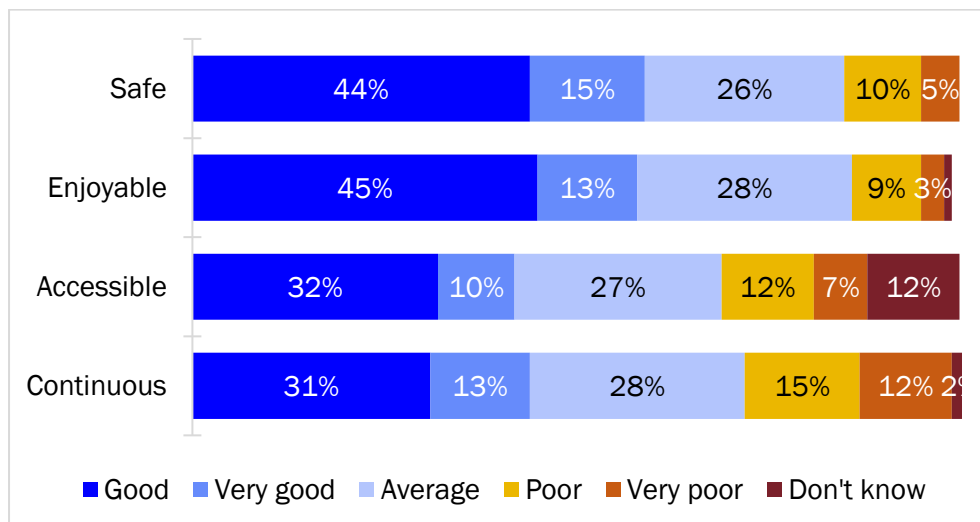
Under 35 year olds are more frequent users of footpaths, with 55% indicating daily use. This drops notably after the age of 35, with a high 11% of 35-49 year olds and 12% of 50-59 year olds only using footpaths monthly.

Those who said they use footpaths were asked to rate a range of aspects relating to footpaths. Findings show that the perceived accessibility of footpaths is increasing over time, from 34% of respondents rating footpath accessibility as good or very good in 2019, up to 42% in 2023. Furthermore, rating footpath continuity as good or very good has increased from 32% in 2019, up to 44% in 2023.

Figure 27 Rating of footpaths as good or very good, over time



Footpaths were generally rated as safe and enjoyable, however some rated accessibility and continuous as very poor, particularly in the Hills (20% accessibility very poor, 24% continuous very poor) and East (21% accessibility very poor, 27% continuous very poor) regions.

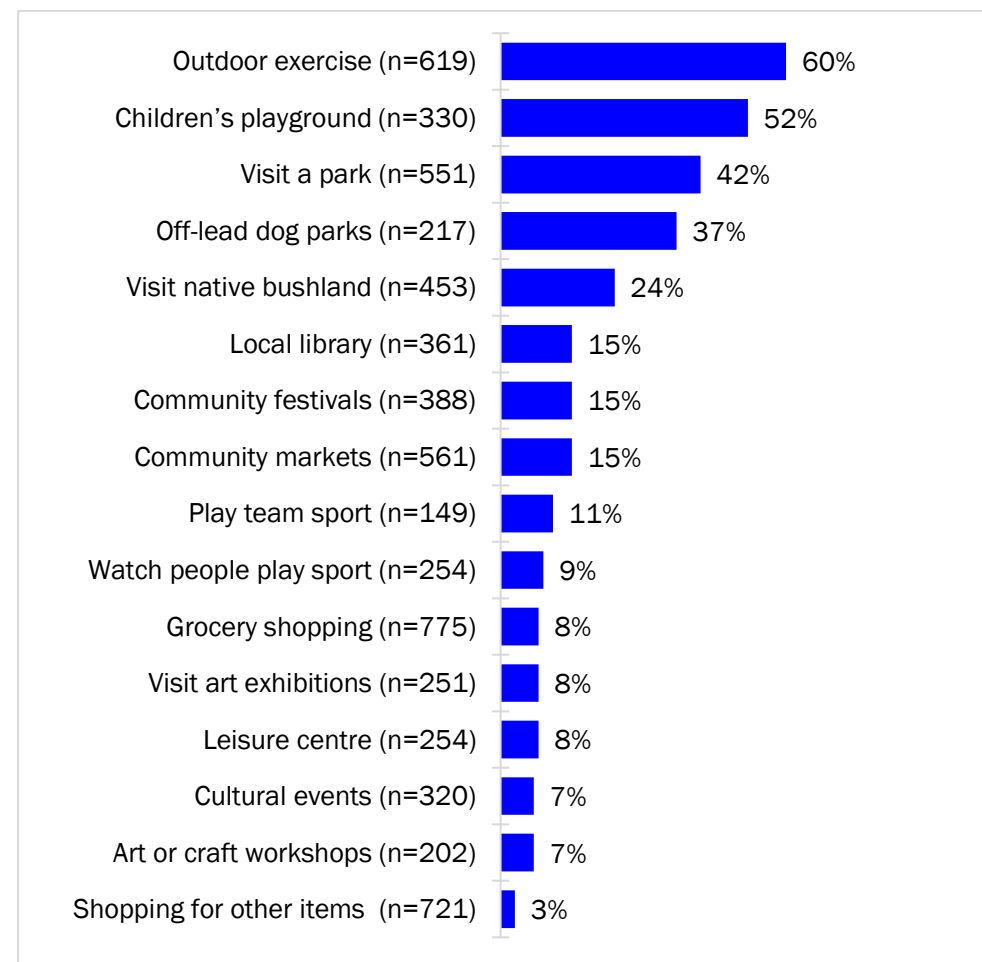


An additional question in 2023 asked if people use a mobility aid when using footpaths. 3% said they use a walking frame (9% 70+ year olds), 4% said they use a walking stick (14% 70+ year olds) and 2% use a mobility scooter (4% 70+ year olds). Those who use a mobility aid (n=53) more often rate the accessibility of footpaths as poor or very poor (36%).

In 2023 respondents were asked to specify the primary mode of transport used to travel to social, exercise and shopping activities.

The activities where people more commonly travel by active transport were non-competitive outdoor exercise, visiting children's playgrounds and visiting parks.

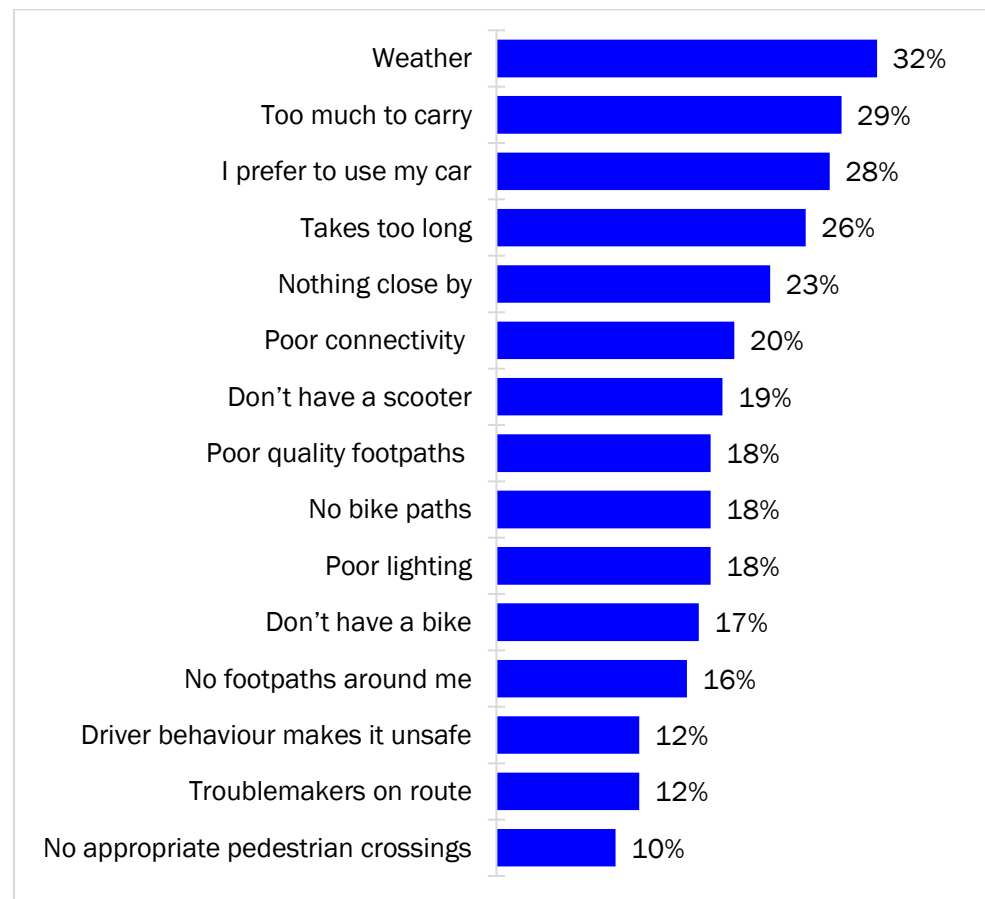
Figure 28 Proportion of those who undertake activities who travel to the activity by active transport, 2023



In 2023 respondents were asked to specify anything that stopped them from walking, riding or scooting to participate in local activities (e.g. going to the park, shopping locally etc.). One in ten (10%) said there was nothing stopping them; that they already walk, ride or scoot to most things local.

The main things stopping people from using active transport for local trips were the weather, too much to carry and liking using their car.

Figure 29 Things stopping people from using active transport for local trips, 2023 (10% or higher)



Not having footpaths nearby was a particular barrier for those living in the Hills (49%), South (18%) and East (31%) regions, and 33% of Hills region respondents said poor path connectivity.

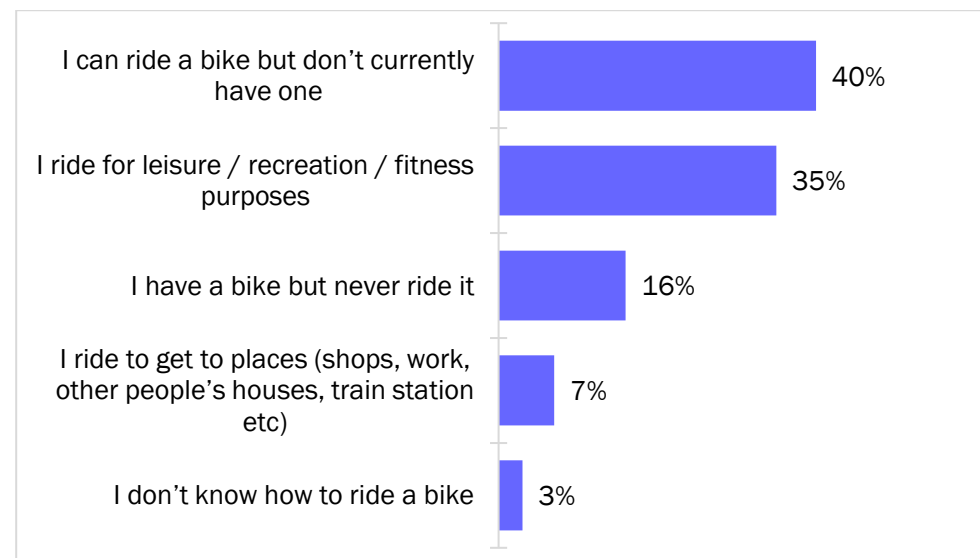
Furthermore, 33% of South region respondents said there was nothing within walking or riding distance to travel to.

Females more often cited the weather and having too much to carry as barriers (38%, compared to 25% males).

A quarter (26%) of those aged 70+ said that a physical disability prevents them from using active transport.

In 2021, respondents were asked about their bike riding / ownership status, and barriers to riding their bicycle more often (of those who have a bike). It was found that four in ten didn't have a bike at time of survey, and one in seven have a bike but don't ride it. When people do ride it is mostly for leisure purposes.

Figure 30 Bike riding / ownership status, 2021



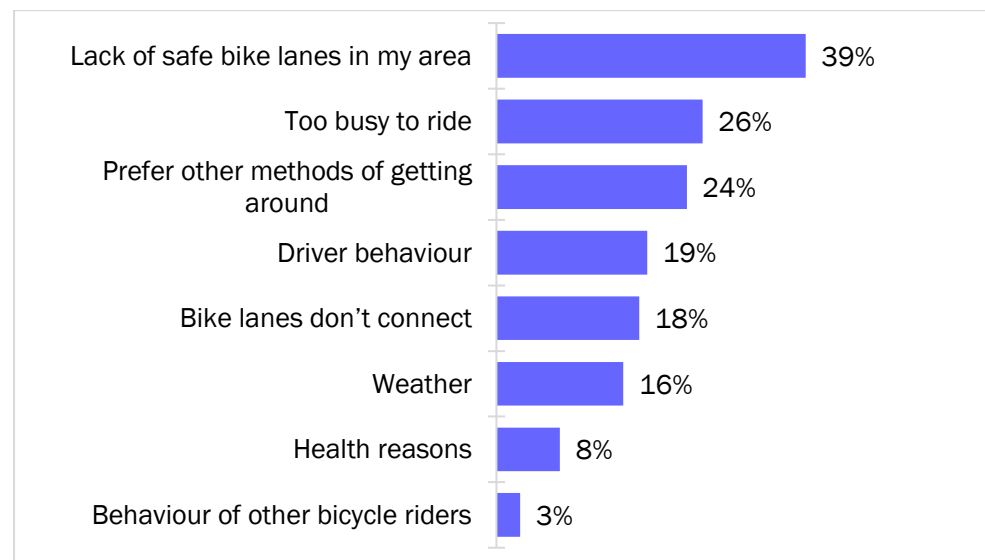
Females more commonly state that they don't currently have a bike (45%, compared to 35% males), or have a bike but never ride it (19%, compared to

12% males), whilst males more often ride for leisure (44%, compared to 27% females).

Riding for leisure is more common amongst those aged 35-54 (46%, compared to 31% under 35 year olds and 23% 55+ year olds).

Of those who indicated that they had a bike (n=528, 2021 data), the most common barriers to riding more often were safety concerns, and lack of time.

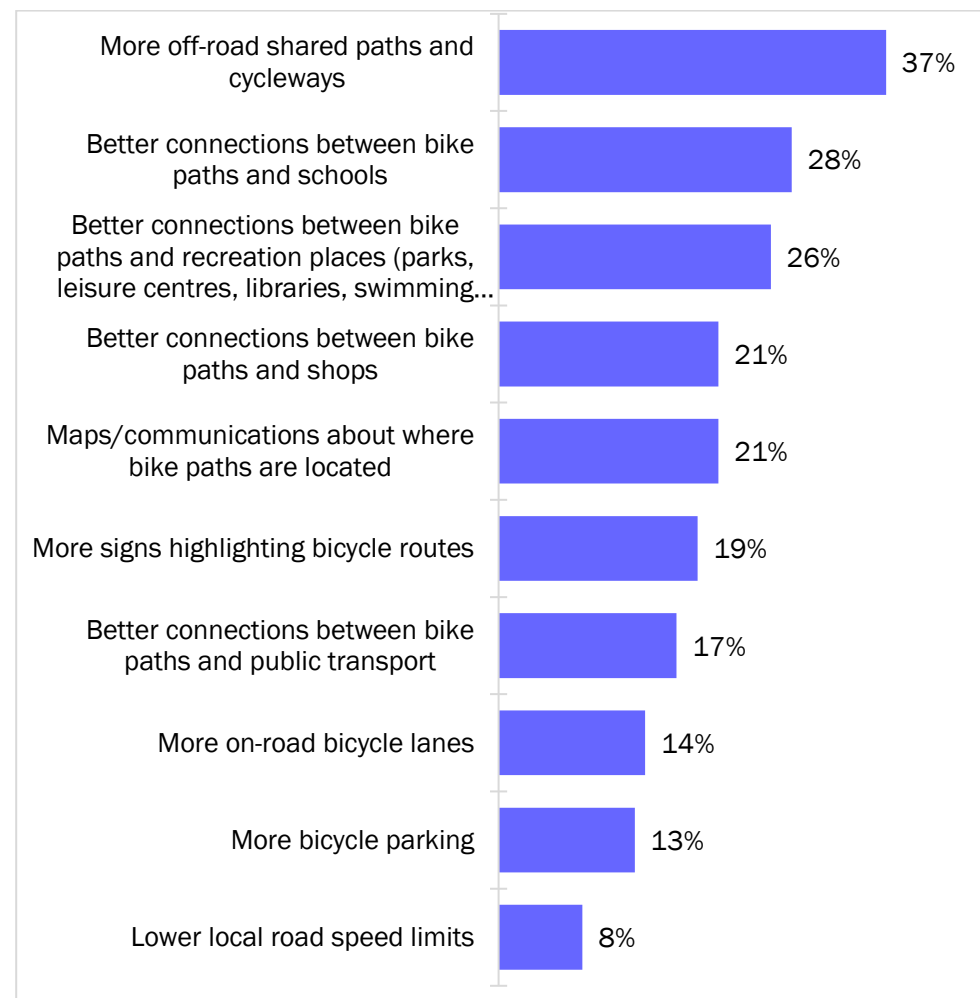
Figure 31 Bike riding barriers, of those who own a bike, 2021



Lack of safe bike lanes was more commonly mentioned by those in the South (64%) and Hills (46%) regions, while those in the Growth region more often indicated the lanes didn't connect (21%, compared to 6% East). 35-54 year olds more often indicate being too busy as a barrier (37%, 10% 55+ year olds) whereas older residents more often cite health issues (22%, compared to <5% under 55 year olds).

In 2021, when asked to rate the priority of a range of actions Council could take to encourage bike riding in your local area, the options rated by the most respondents as a very high priority were

Figure 32 Very high priority Council actions to encourage bike riding, 2021



Those in the Hills and South regions more often rate better connections as a high priority.

Food

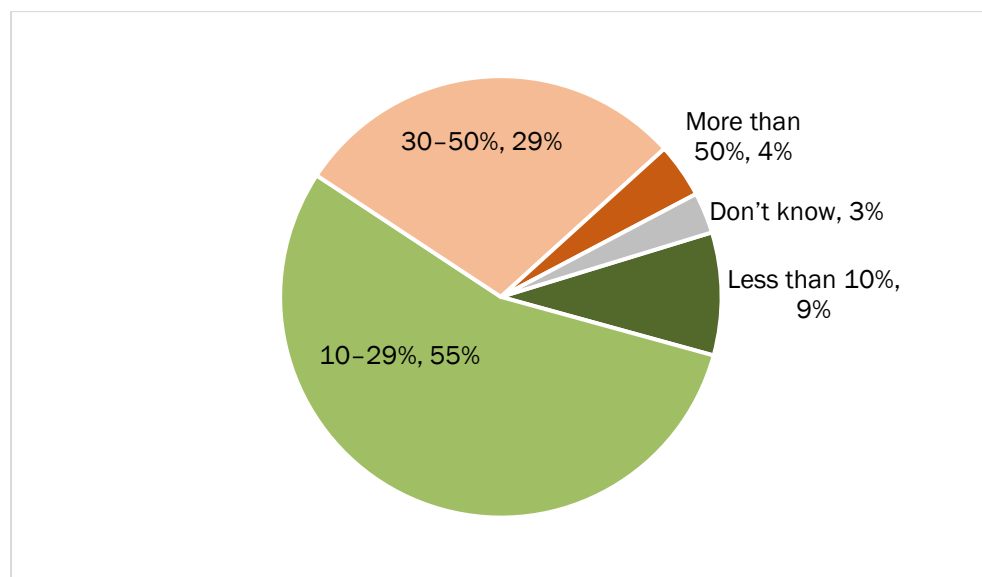
The Liveability Plan strategic indicator for Food is “Increase access to affordable, nutritious food.”

In both 2021 and 2023, 2% of respondents indicated they had accessed food support services in the 12 months prior to interview (not asked in 2019). In 2023, the incidence of accessing food support services was higher amongst renters (7%, compared to 1% of those who own with a mortgage), and single parents (13% compared to 1% or less for other household categories). Over half (65%) of those accessing food support services did so through a service within the Shire.

In 2023, 7% of respondents said they ran out of food and couldn't afford to buy more in the 12 months prior to interview, up from 4% in the 2021 Liveability Survey.

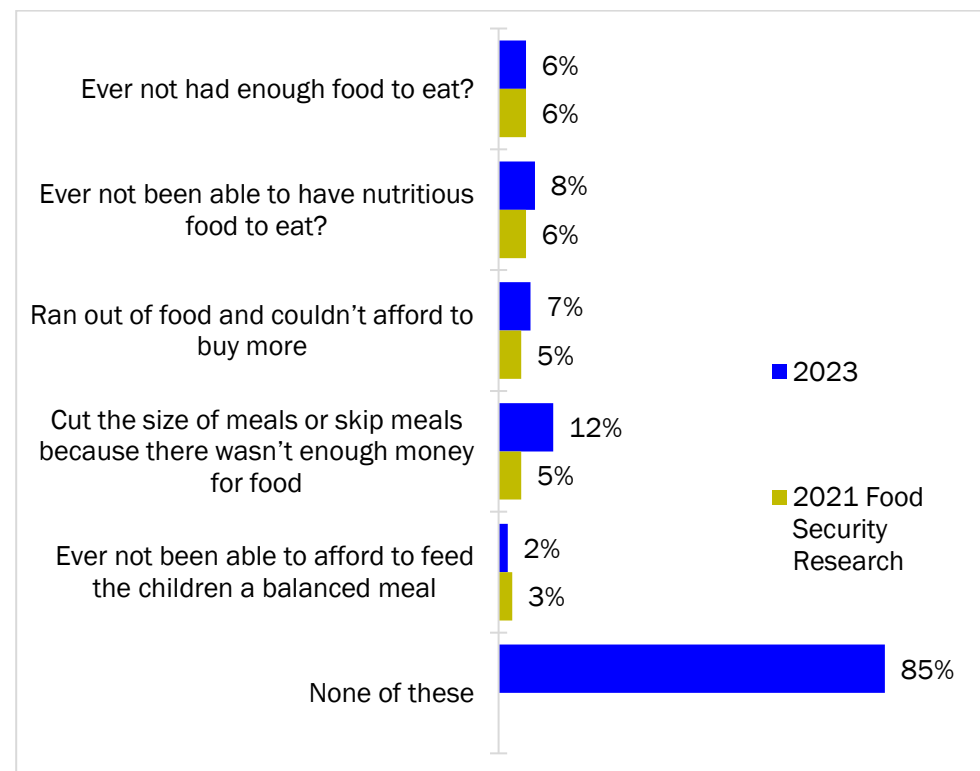
A new question in 2023 asked respondents what proportion of their household income is typically spent on food. A third (33%) indicated that they spend more than 30% of their household income on food.

Figure 33 Proportion of household income spent on food, 2023

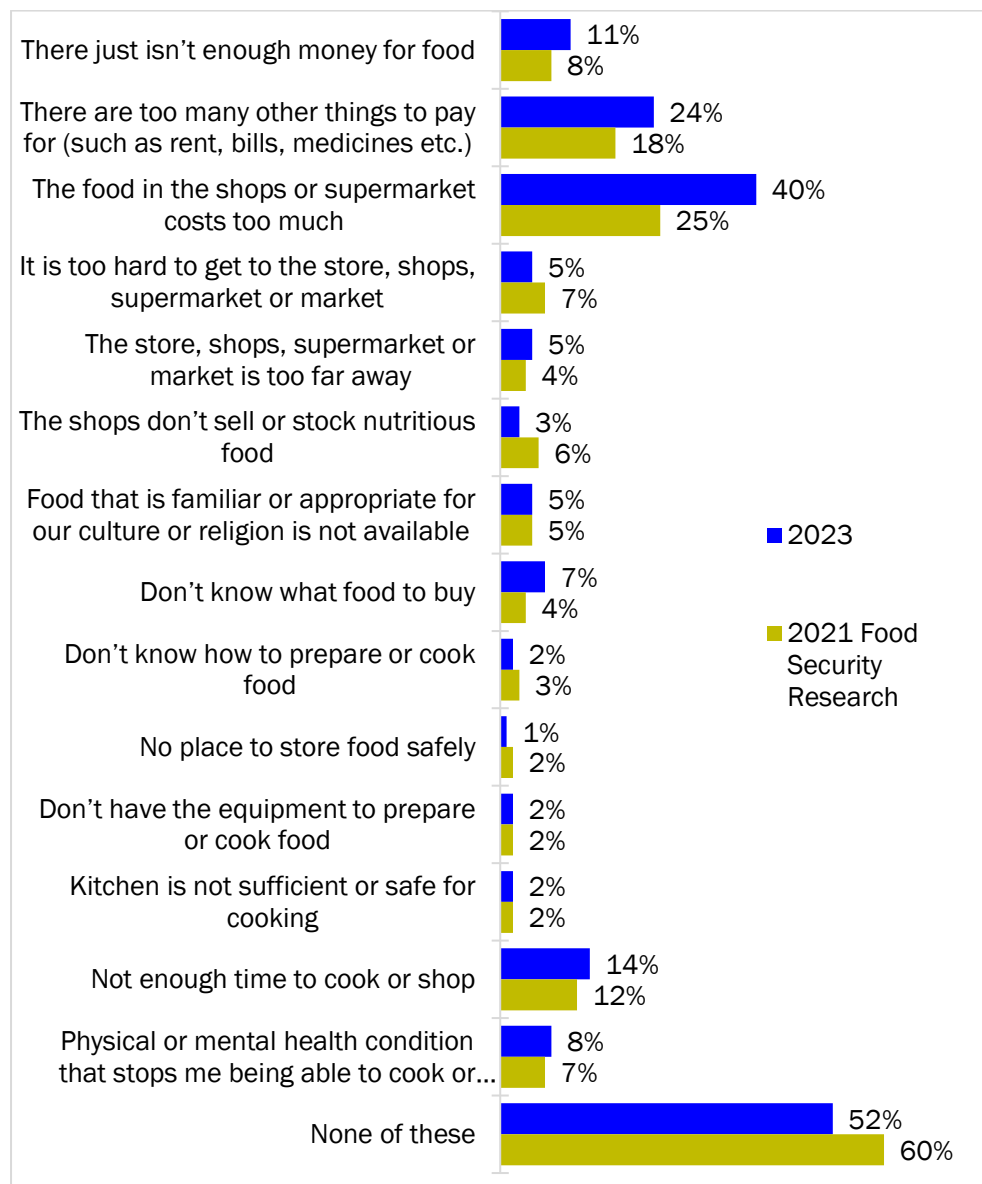


When comparing the 2023 Liveability Survey findings to the 2021 Cardinia Shire Food Security survey, there has been a significant increase in the proportion of respondents indicating they have cut the size of meals or skipped meals because there wasn't enough money for food.

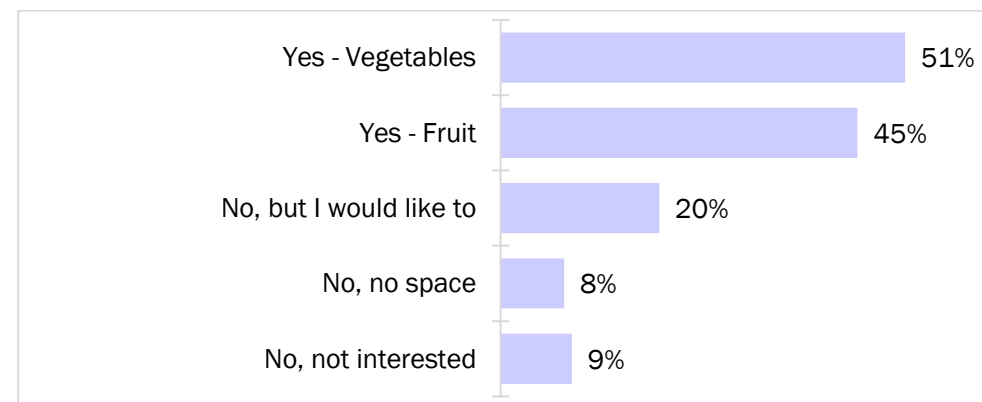
Figure 34 Experiences of food insecurity in the 12 months prior to interview



When comparing the 2023 Liveability Survey findings to the 2021 Cardinia Shire Food Security survey, there has been a significant increase in the proportion of respondents indicating the food in supermarkets costs too much, there are too many other things to pay for, and there isn't enough money for food.

Figure 35 Experiences of food insecurity in the 12 months prior to interview

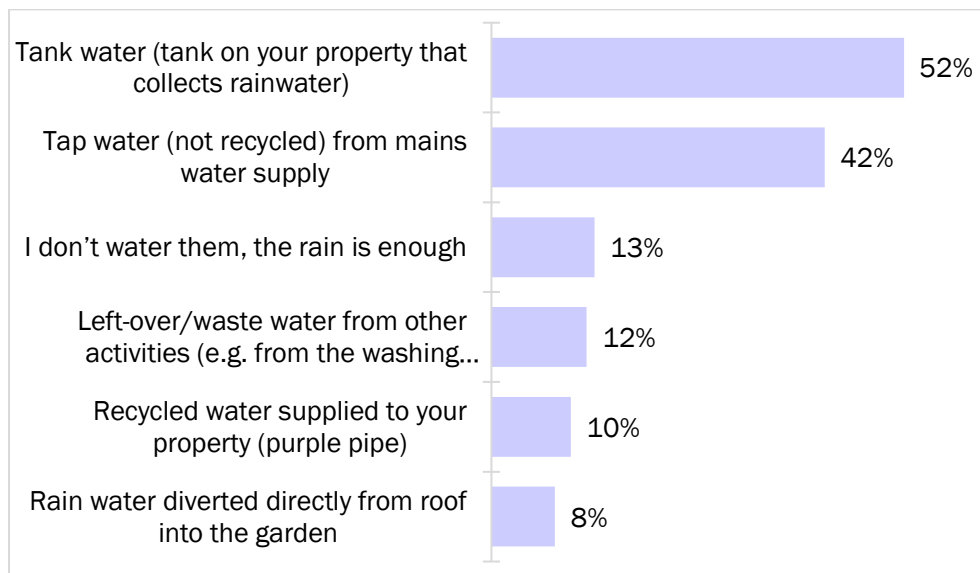
In the 2019 survey, respondents were asked if they grow fruit or vegetables at home. More than half said they grow vegetables, and almost half said they grow fruit. When combining the two, 63% of respondents said they grow fruit and/or vegetables.

Figure 36 Growing fruit or vegetables, 2019

The incidence of growing fruit and/or vegetables increases with age, and is more common in the Hills and South regions.

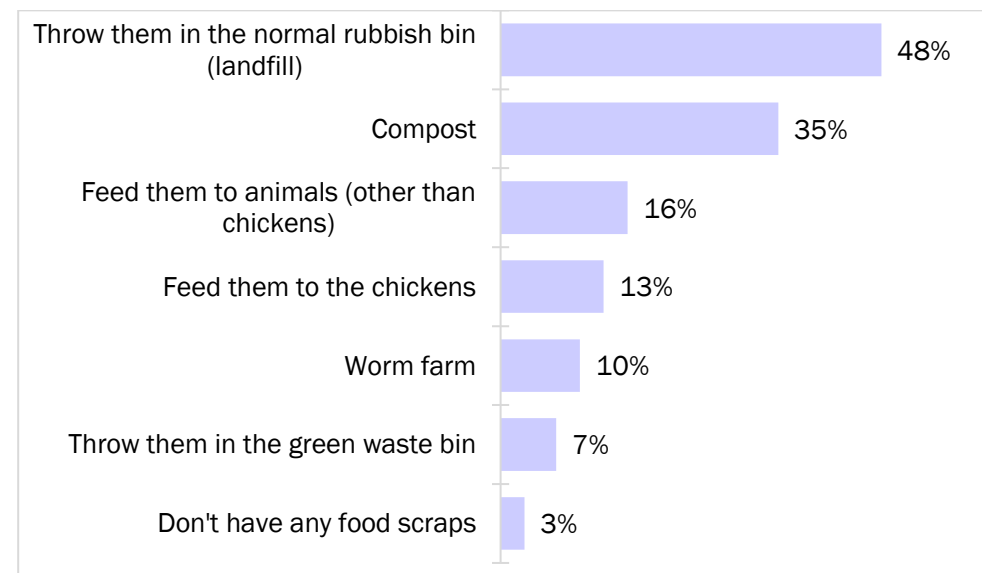
Those who said they grow their own food (n=483) were asked how they water the food they grow at home. Half indicated that they have tank water to water their garden, although four in ten said they use mains tap water. In total, 73% water their food using water captured at home (tank, rain, left-over, rain diversion). Over half (56%) of those who use potable / mains water use water collected at home as well, leaving only 18% of all of those who grow their own food who use only potable / mains water.

Figure 37 Home grown food watering behaviours, 2019



In 2019 respondents were also asked what they do with their food scraps. It was found that around half will throw them in the bin, with the remainder mostly composting them and/or feed them to animals.

Figure 38 Food scrap disposal behaviours, 2019



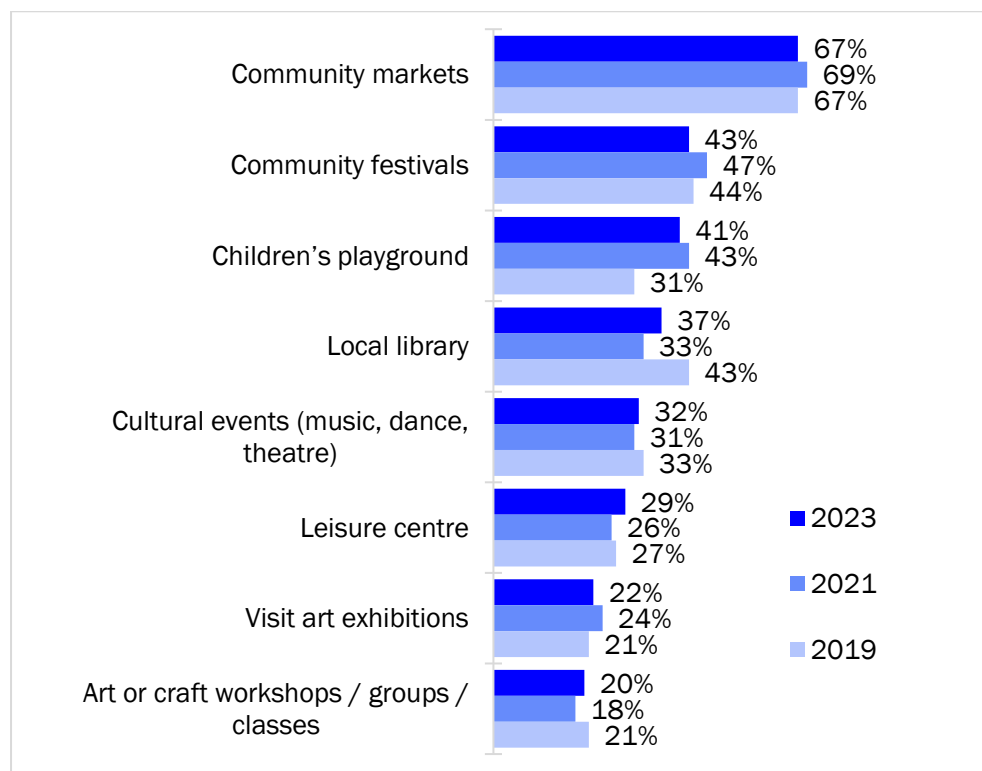
Throwing food scraps in the landfill bin was a more common behaviour amongst under 35 year olds (71%, compared to 39% 60+ year olds) and those in the Growth region (63%, compared to 48% Hills and 36% South).

Community infrastructure and services

The Liveability Plan strategic indicator for Community infrastructure and services is “Increase access to community infrastructure and services close to home”.

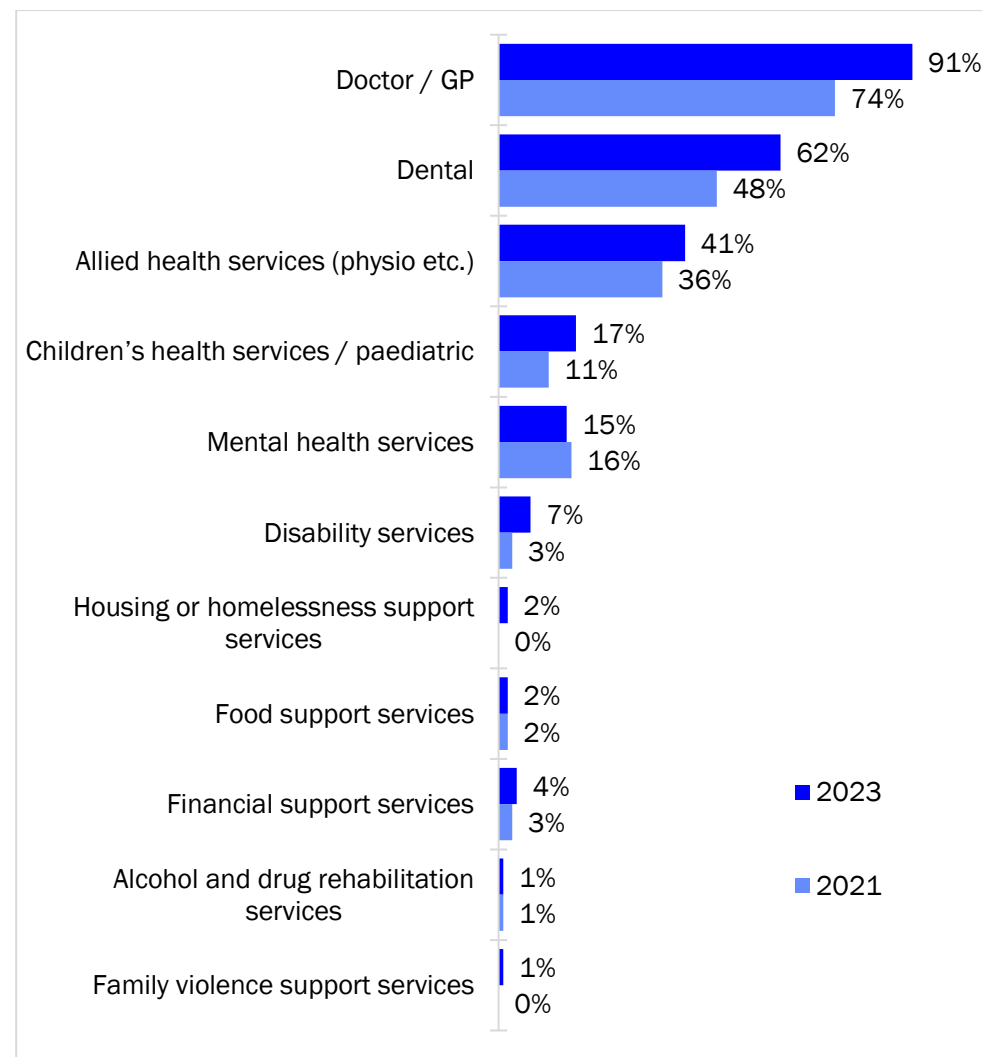
The most common community infrastructure and services that the community likes to use are community markets and festivals, followed by children’s playgrounds and libraries. During the height of COVID-19, use of libraries fell (due to being closed) whilst use of playgrounds increased. These are both slowly returning to pre-COVID-19 levels.

Figure 39 Types of activities residents like to participate in, over time



The main services people use are doctors, dental and allied health services. Use of some services was lower in 2021 due to COVID-19 lockdowns.

Figure 40 Use of services, over time

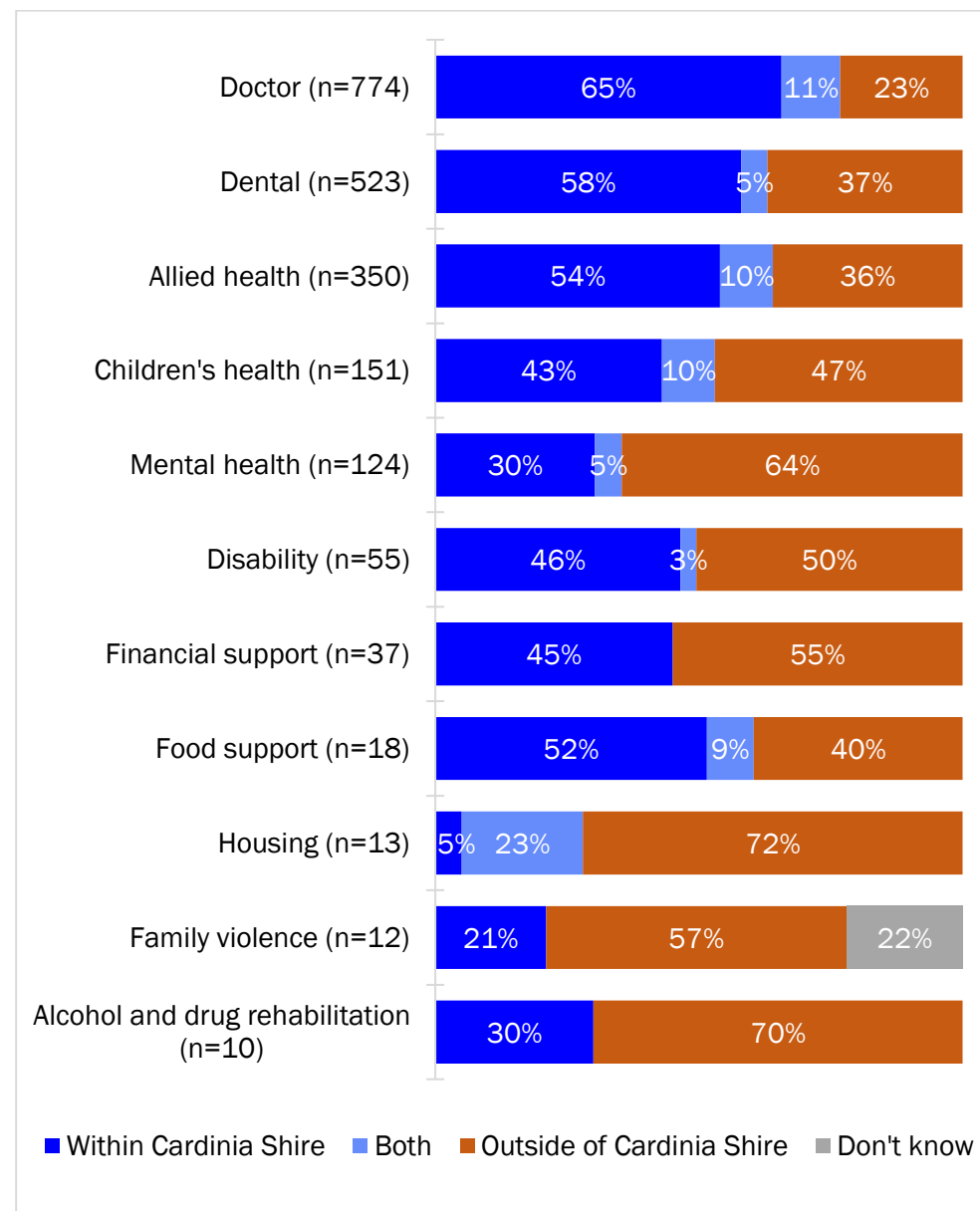


Those who said they had used services were then asked whether they access these services within Cardinia Shire, or outside of Cardinia Shire.

More than half are able to access a doctor, dental, allied health, and/or food support within the Shire, however many are having to go outside of the Shire for these and other services, with a particular gap in local services for mental health, housing and alcohol and drug rehabilitation.

Those in the Hills region more often have to travel outside of the Shire for allied health (54%), dental (62%), and/or a doctor (37%).

Figure 41 Location of services used, 2023



Housing

The Liveability Plan strategic indicator for housing is “Increase access to appropriate and affordable housing.”

Respondents were asked to type in what they think of when they see or hear the term ‘social housing’. The 766 respondents answers were grouped into themes for ease of analysis.

The top three topics raised are consistently relating to low socio-economic, less fortunate people or households.

The main ‘issues’ mentioned were crime (5%), drugs, and alcohol. Comments specifying unattractive structures (3%), poor maintenance (5%) and/or untidy / messy (4%) have been grouped under ‘amenity’. The incidence of mentioning issues and/or amenity has been increasing over time.

In 2023 there was a significant increase in the proportion of descriptions mentioning affordability, suggesting that the recent housing affordability crisis is impacting on social housing perceptions.

In 2023 there was also an increase in the proportion of definitions that mention that social housing is needed.

After writing in what they think of when hearing the term ‘social housing’, respondents were asked to rate their level of support for social housing. In 2021 opposition increased slightly and has remained at this level in 2023; support has remained constant over time.

Strong support is highest amongst those who mentioned in their definition that social housing is needed (45% strongly support), whilst stronger opposition was recorded amongst those who mentioned a decline in property values (35% strongly oppose) and/or unattractive structures (including ghettos and slums, 27% strongly oppose).

Figure 42 Things think of when hear the term ‘social housing’, over time

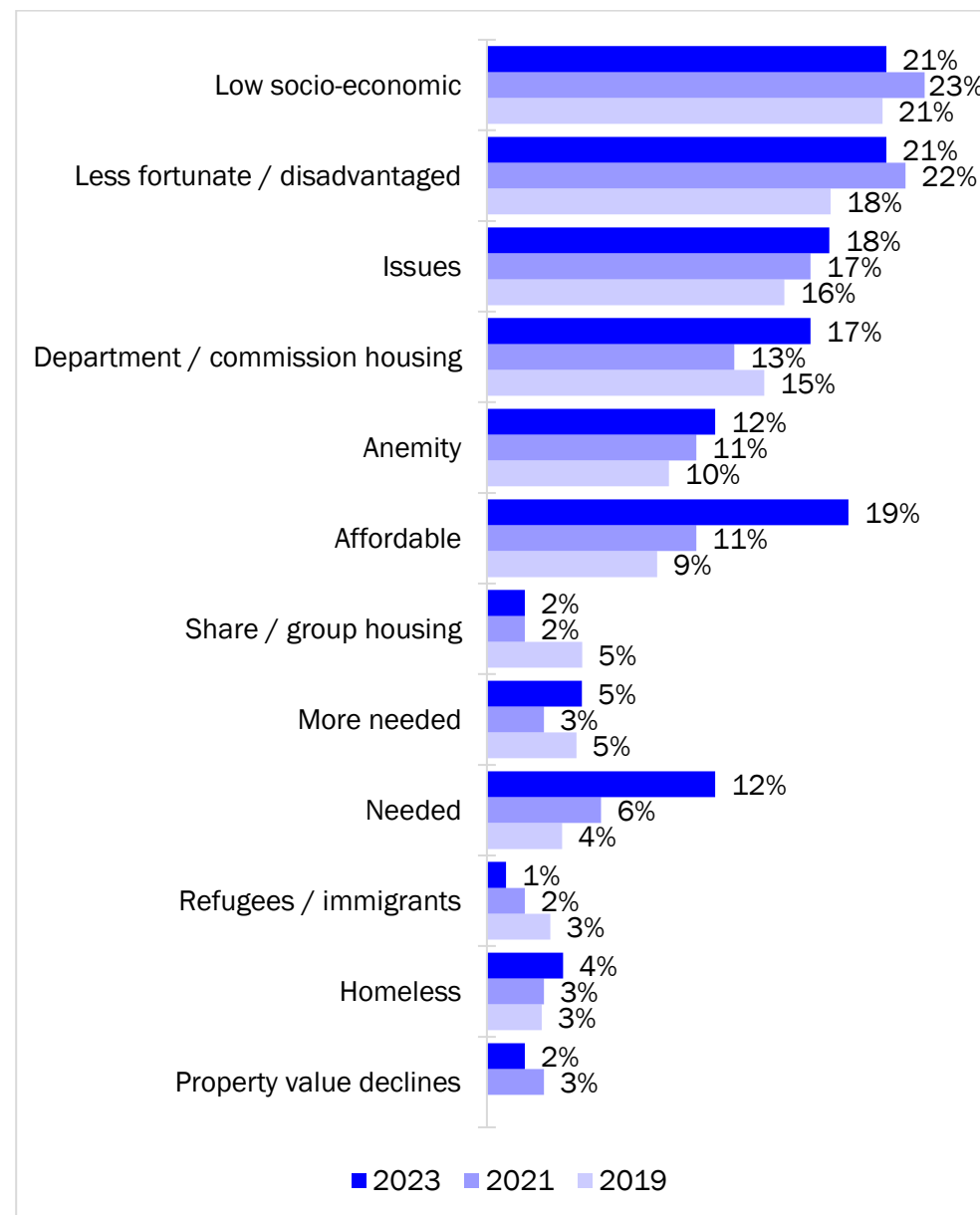
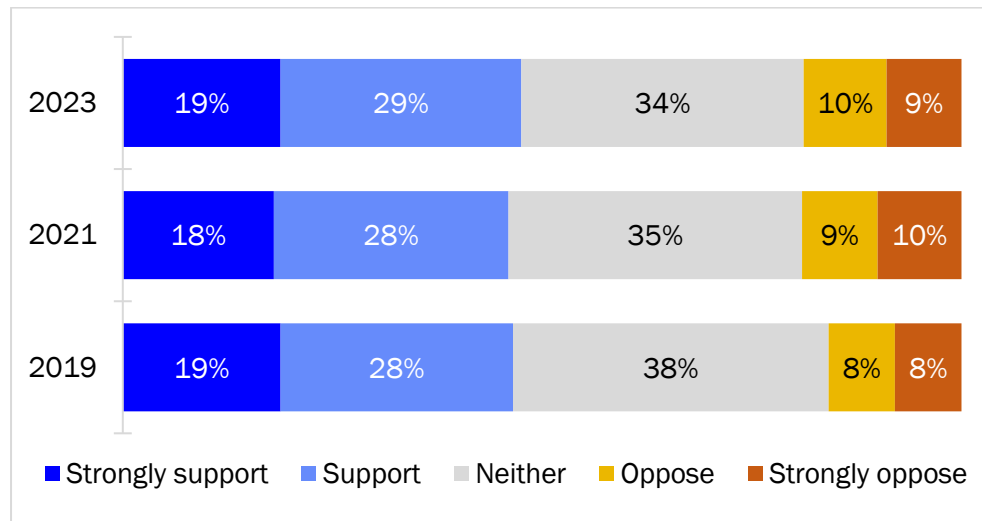


Figure 43 Opinion of social housing, based on own definition, over time

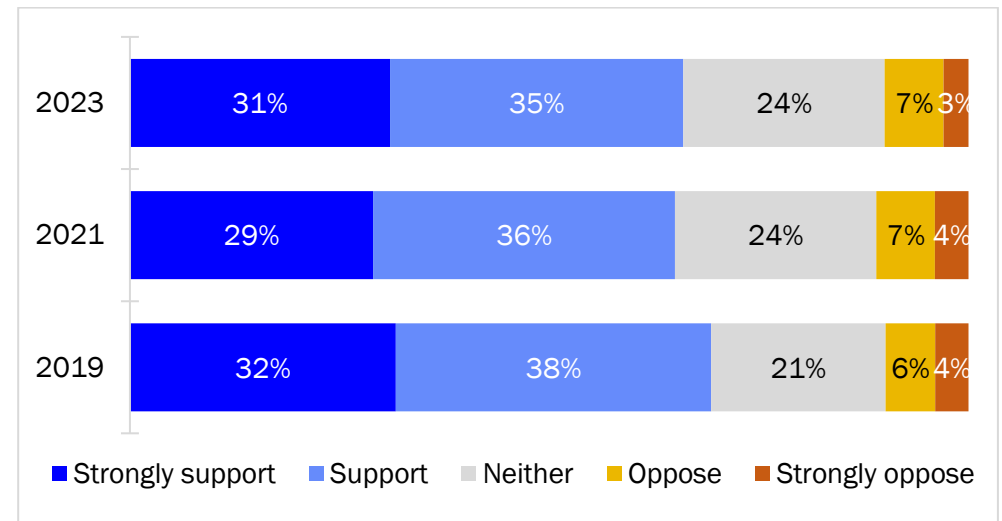


Respondents were then provided with the following definition and asked to rate their support for social housing.

“housing that is specifically built and/or allocated to assist members of the community who have very low incomes, disabilities, or are impacted by family violence, or who are unable to find housing themselves”

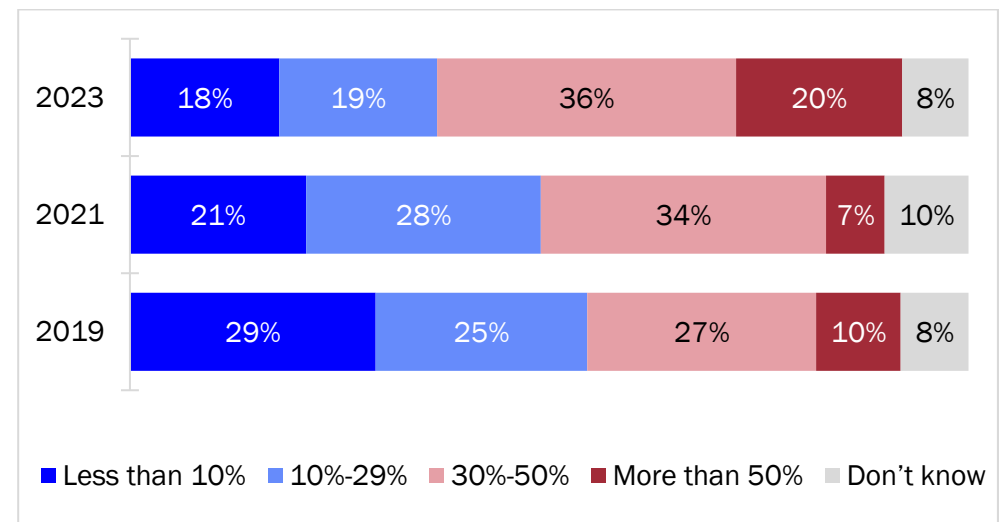
A notably higher proportion support social housing when given this definition. Indeed, in 2023 49% of those who initially rated social housing as ‘neither’, and 18% of those who initially rated ‘oppose’ (including strongly oppose) were converted to support after seeing this definition.

Figure 44 Opinion of social housing, based on Council’s definition, over time



In 2023 there was a significant increase in the proportion of respondents stating that they spend 30% or more of their household income on housing costs.

Figure 45 Amount spent on housing costs (rent, mortgage), over time

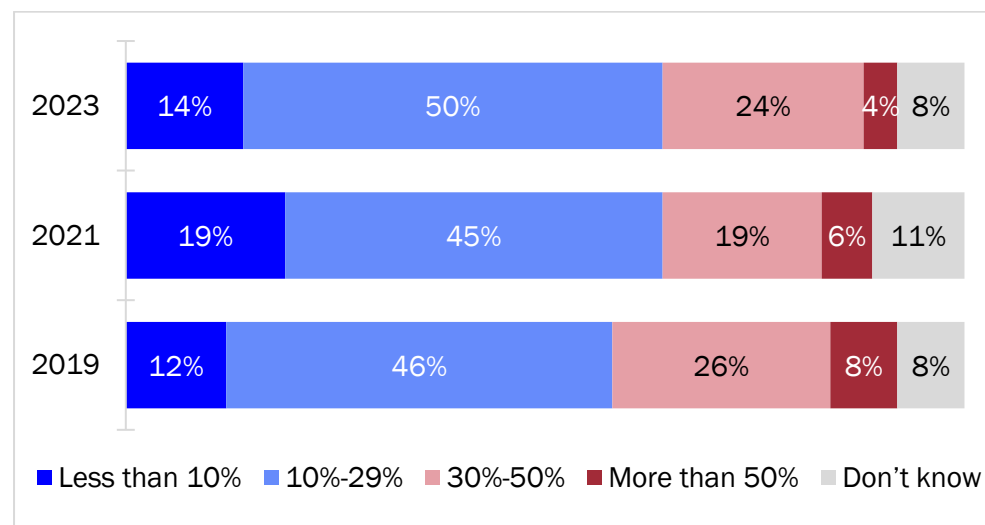


Spending more than 50% of income on housing costs was more common in 2023 amongst younger respondents (30% under 35 year olds), those who speak a language other than English (32%), those paying a mortgage (28%) and single parents (45%).

Housing stress is defined as a household that spends more than 30% of their household income on housing (mortgage or rent). In 2023, housing stress was significantly higher amongst households in the growth region (59%) and Hills region (52%), and was the case for 71% of those with a mortgage and 70% of renters.

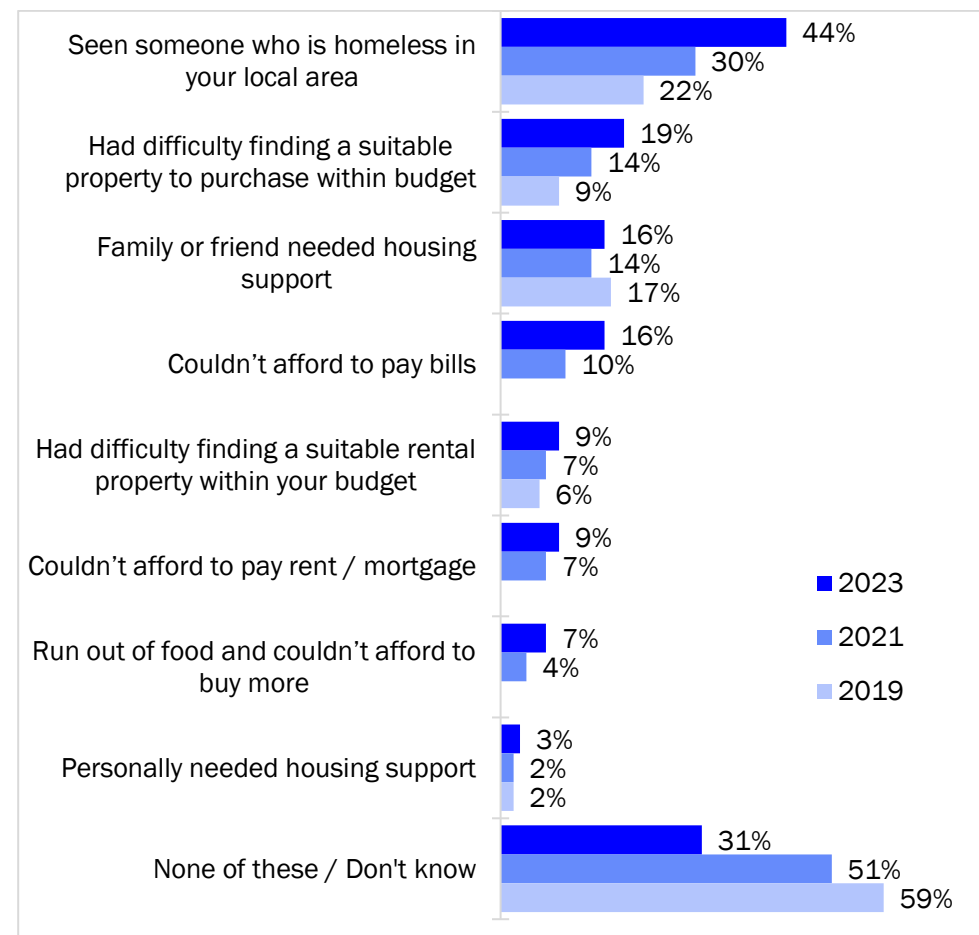
The proportion of household income spent on utilities has remained relatively constant over the last 3 surveys.

Figure 46 Amount spent on utilities, over time



Over time there has been a noticeable increase in the proportion of respondents who indicated they had seen someone homeless in their local area, had difficulty finding a suitable property to purchase within budget and/or couldn't afford to pay bills.

Figure 47 Personal experience of challenges associated with housing, over time



When asked if they or their family had experienced any of a list of negative impacts in the 12 months prior to interview, in 2023 28% said rental or mortgage stress, up from 13% in 2019 and 2021.

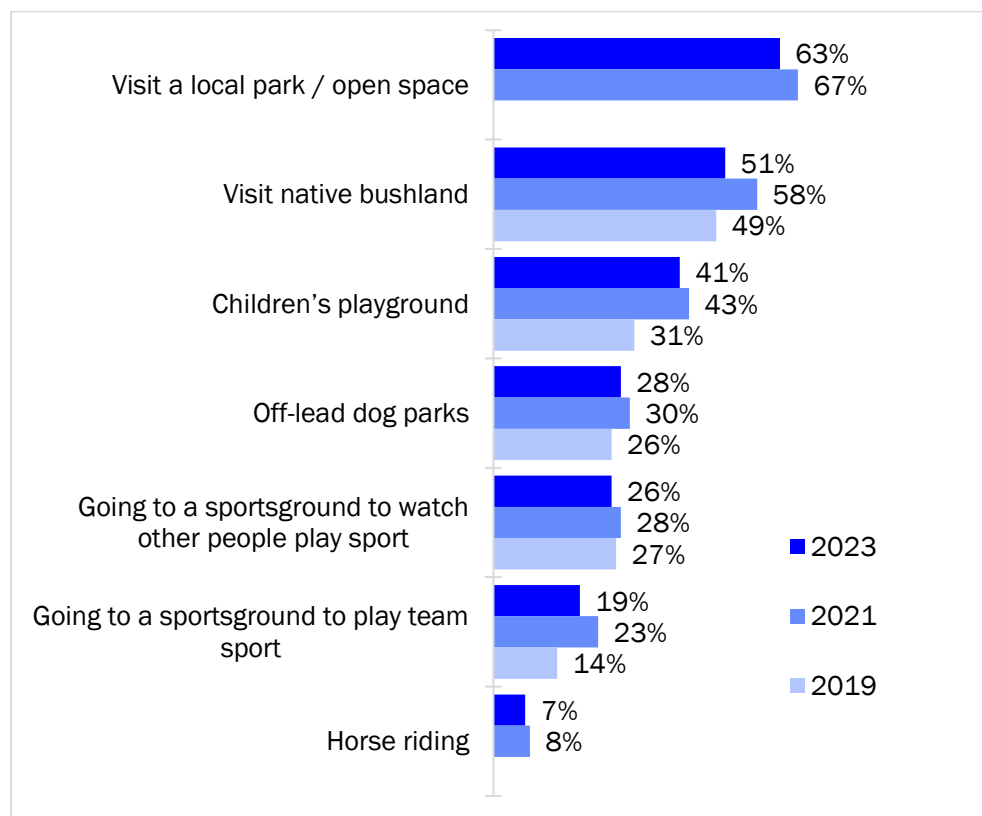
Environment and open space

The Liveability Plan strategic indicator for Environment and Open Space is “Increase environmental sustainability and increase access to public open space.”

Almost three quarters of residents said they like to visit a local park or open space. This fell slightly in 2023 when compared to 2021, however further waves of data is needed to identify if this is a trend.

Visiting native bushland was more popular during COVID-19 and has since fallen back to pre-COVID-19 levels.

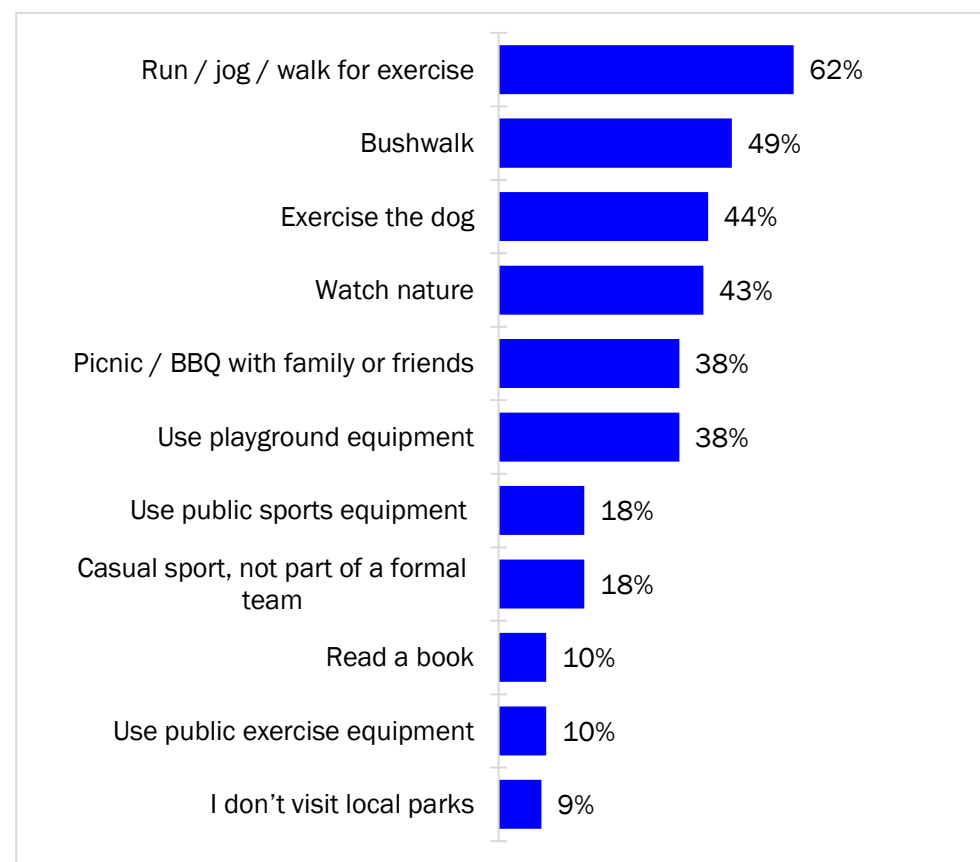
Figure 48 Types of activities residents like to participate in, over time



In 2023, visiting open space was more common amongst those living in the Hills (63%) and Growth (65%) regions, compared to 44% South region. Visiting a local park / open space decreases with age, from 74% 18-35 year olds, down to 38% 70+ year olds. Those who speak a language other than English also show a higher instance of liking visiting local parks and open space (71%, compared to 61% English only speakers).

In 2023, nine in ten respondents (91%) said they ever visit parks and reserves. This is lower amongst those living in the South region (72%), and older adults (74% 70+ year olds).

Figure 49 What people typically do when visiting parks and reserves, 2023



When visiting local parks and reserves the primary activities undertaken were exercising, bushwalking, watching nature and exercising the dog.

There were a variety of notable variations in activities in parks and reserves across the community:

- Those in the Hills region more commonly use skate facilities (13%) bushwalk (58%).
- Those in the Growth region more commonly exercise (68%).
- Females more commonly picnic (43%) and visit playgrounds (42%).
- 18-34 year olds more commonly picnic (44%) and use playgrounds (50%).
- 35-49 year olds more commonly picnic (44%), use public exercise equipment (15%), use playgrounds (50%), use public sports equipment (29%), and play casual sport (27%).
- Participation in most activities declines as people age, with a significant drop in 70+ year olds.
- Those who speak a language other than English more commonly undertake most activities, with the exception of walking the dog, where this segment shows a lower instance of participation (22%, compared to 49% English-only).

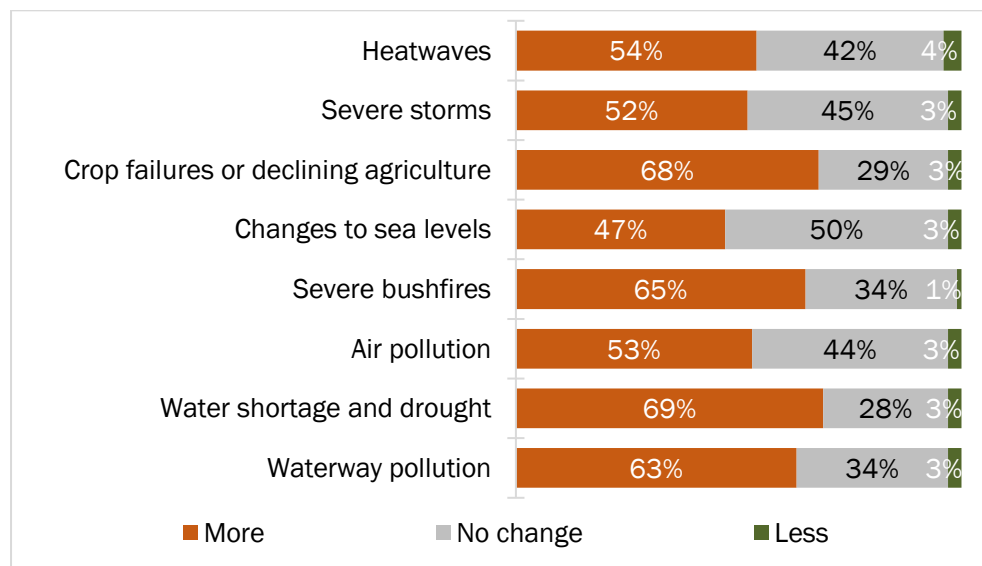
Climate change

The natural environment, and managing the adverse impacts of climate change, is regarded as an underlying determinant of healthy and liveable neighbourhoods. All liveability domains are impacted by the adverse effect of climate change, which often exacerbates underlying community vulnerability.

The questions relating to climate change have altered each survey to meet the current strategic needs of Council planning. The Improve financial wellbeing and resilience and Environment and open space sections of this report also provide findings that are related to this topic.

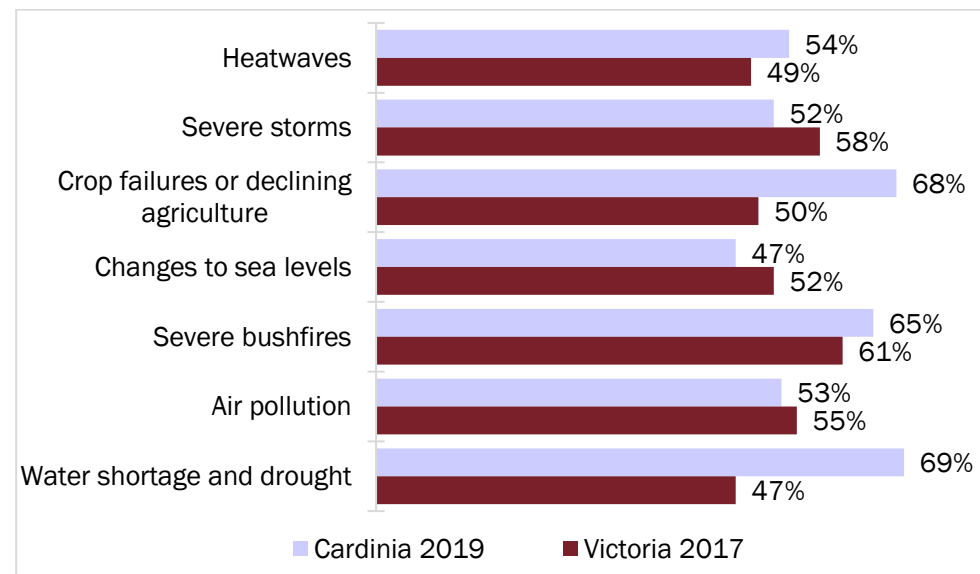
In 2019, respondents were asked to specify whether they had noticed any changes in extreme weather events in the 10 years prior to interview, with the most commonly recognised areas of increased issues being water shortages / drought, crop failures, bushfires and waterway pollution.

Figure 50 Noticed changes in last 10 years, 2019



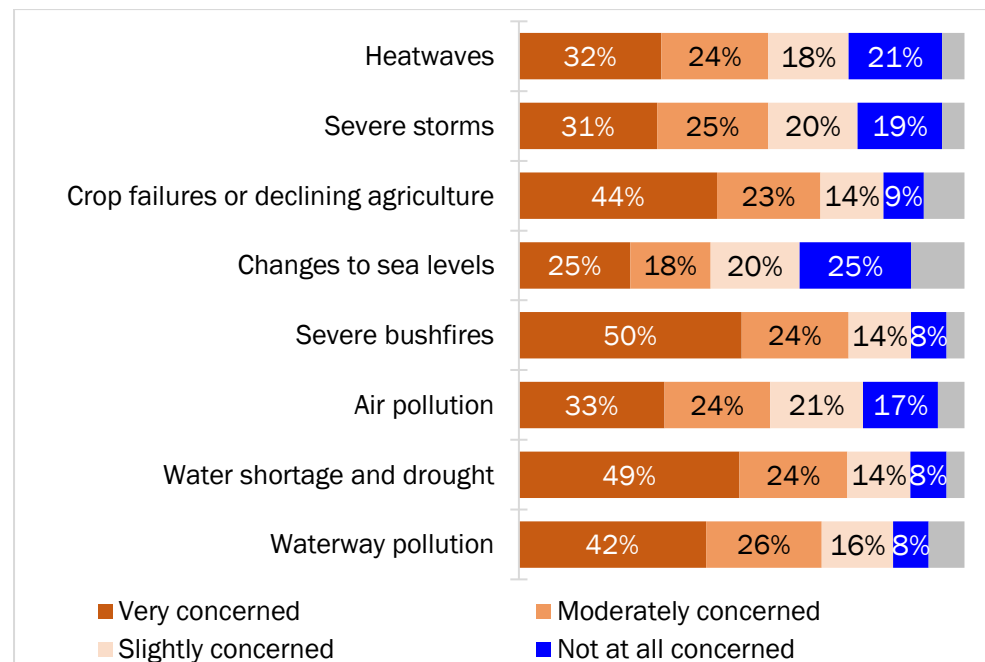
When comparing these findings to statewide data from the Sustainability Victoria 2016-2017 household research³, Cardinia residents more commonly perceive there be water shortages and drought and crop failures.

Figure 51 Incidence of saying 'more' in last 10 years, 2019 compared to Victoria



In 2019, respondents were also asked to rate their level of concern about extreme weather events over the 10 years following interview.

Figure 52 Concern regarding changes in the next 10 years, 2019

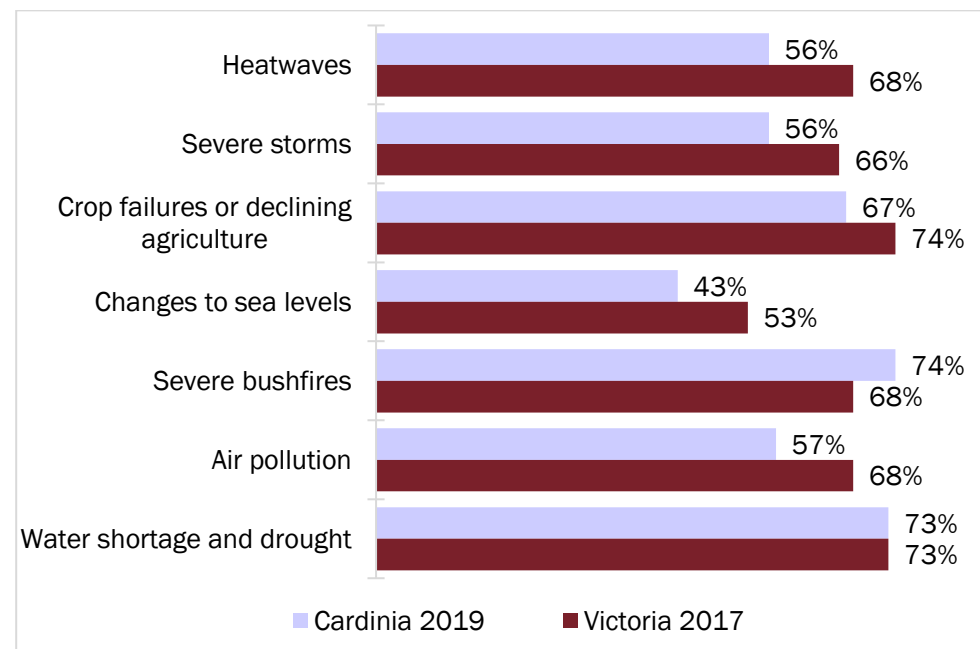


Higher instances of 'Very Concerned' were recorded for:

- Heatwaves in Ranges (37%) and Port (35%) wards;
- Severe storms and floods in Ranges (34%) and Port (35%) wards;
- Crop failures or declining agriculture in Port (49%) ward;
- Severe bushfires in Ranges (56%) and Port (53%) wards;
- Air pollution in Port ward (38%) and 18-34 year olds (45%); and
- Changes to sea levels for 18-34 year olds (34%).

When compared to statewide data collected by Sustainability Victoria in 2016-17, Cardinia Shire residents are more commonly concerned about bushfires

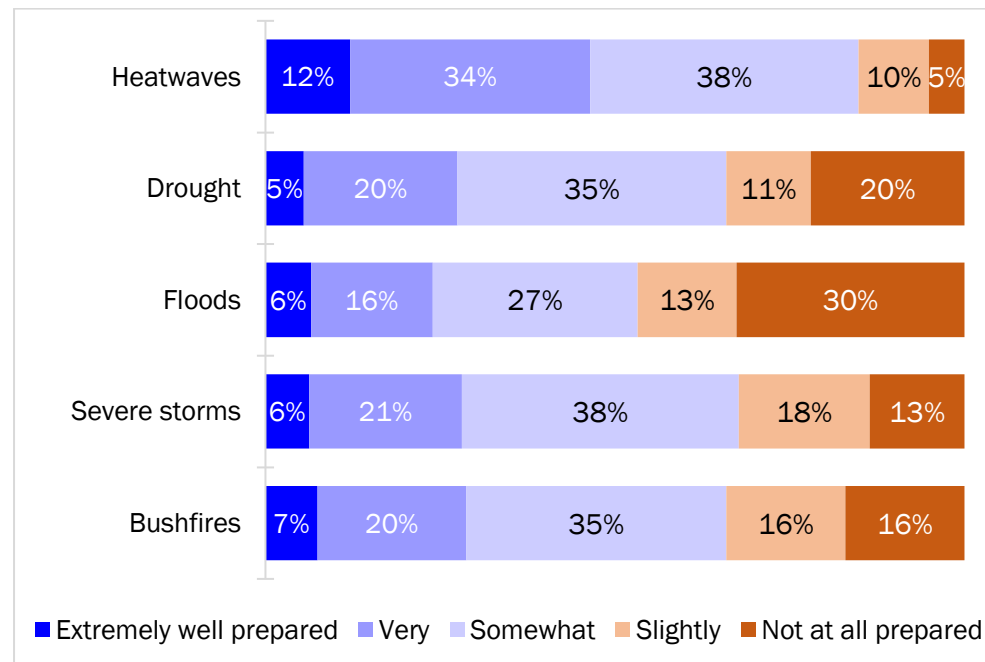
Figure 53 Incidence of saying 'very + moderately concerned' for next 10 years, 2019 compared to Victoria



In 2021 the climate change related questions focused on preparedness for extreme weather events.

In general, most are at least somewhat prepared for heatwaves, severe storms and bushfires, however many aren't prepared for droughts or floods.

Figure 54 Preparedness for extreme weather events, 2021



Segments of the community showing higher instances of not being prepared at all were:

- Females showed higher instances of not being prepared at all for heatwaves (7% compared to 2% males), severe storms (16%, 11% males), and/or bushfires (20%, 13% males);
- 27% of those in the Growth region were not prepared for drought and 36% were not prepared for floods;
- 39% of those who speak a language other than English were not prepared for drought, 51% were not prepared for floods and 28% were not prepared for severe storms;

- 19% of those in the East region and 16% of those in the Growth region were not prepared for severe storms (compared to just 6% in Hills);
- Preparedness for all events increases with age.

The 2021 survey also asked what sort of extreme weather impacts they are currently experiencing, or expect to experience in the 5 years following interview.

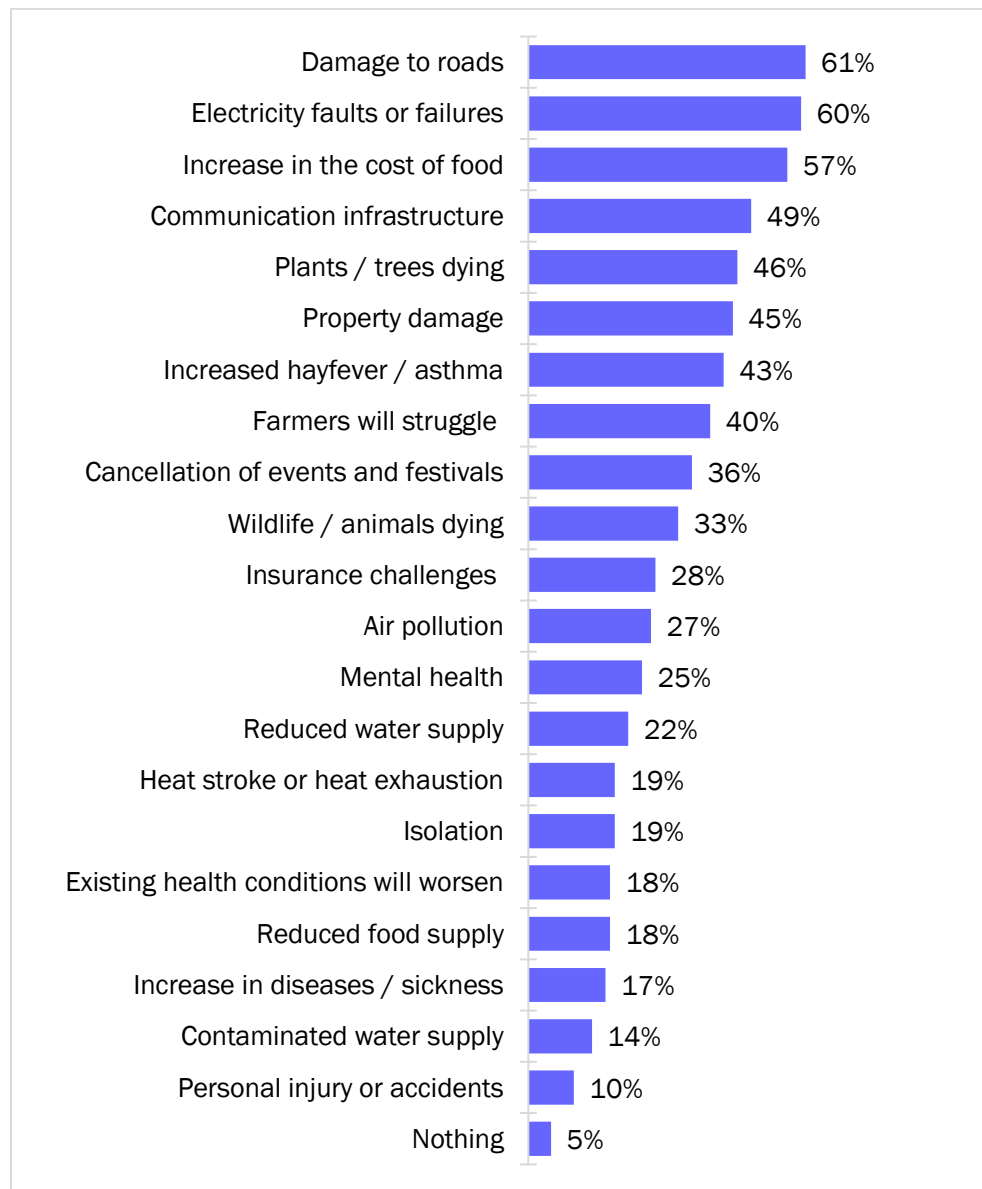
The most commonly selected answers related to infrastructure (roads or electricity). Almost two thirds (63%) selected a human-health related item, including 25% who said mental health.

Notable variations in perceived current and future extreme weather impacts were:

- Those in the Hills region more often experienced/anticipated property damage (70%), electricity faults (70%) and/or damage to roads (79%);
- Males more commonly selected heat stroke (23%, compared to 15% females), whilst females more commonly mentioned most other potential impacts than males.
- Younger respondents (14-34 year olds) more commonly mentioned communication infrastructure damage (58%), increased hayfever / asthma (54%), cancellation of events (43%) and mental health (33%);
- Those who speak a language other than English more commonly mentioned heat stroke (28%), air pollution (40%), reduced water supply (35%), increase in disease and sickness (29%) and personal injury (26%).

Only 5% of respondents said that they don't think extreme weather is having or will have any of these impacts.

Figure 55 Expected extreme weather impacts – current or in next 5 years, 2021



In 2021 respondents were also asked what Council can do to help the community prepare for extreme weather events. Only 2% said nothing.

The community perceives the main opportunities for Council to address extreme weather occur through:

1. **Community support** – especially for vulnerable community members, including advising the community when extreme weather is on the way.
2. **Management of open space** – by planting trees, vegetation maintenance, planting natives and more green spaces.
3. **Strategic Planning** – Requiring new developments to have green spaces and meet best practice sustainability (such as energy and water efficiency, indoor environmental quality, stormwater management, sustainable transport, waste management and urban ecology).

Notable variations by demographics were:

- High proportions of those in the Hills region want Council to provide drinking fountains in parks (45%), allow more clearing on private land (42%), green spaces in new developments (57%), and/or best practice environment standards for new developments (56%).
- High proportion of those in the East region want Council to inform the community of extreme weather forecasts (74%), and/or farm stormwater (54%).
- Those in the Growth region showed high instances of wanting Council to put drinking fountains in park (44%), improve waterways (49%), use white / light coloured road surfaces (23%), ensure new developments have green spaces (58%), improve biodiversity (37%) and Encourage new developments to have best practice environmental sustainability (58%).
- Those in the South region show higher instances of wanting Council to Encourage new developments to have best practice environmental sustainability (62%).
- Younger people more often want council to inform of forecast extreme weather events, educate the community on how to prepare and improve waterways, whereas more older adults want Council to improve vegetation maintenance on public land.

Figure 56 Things Council can do to help prepare for extreme weather, 2021

